

BEFORE THE NATIONAL GREEN TRIBUNAL, KOLKATA

Appeal No.: 06/2020/EZ

Sanjay Chauhan

Applicant

Vs.

Union of India & Ors.

Respondents

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Filed by: -

Surendra Kumar
Advocate

Jharkhand State Pollution Control Board

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BEFORE THE NATIONAL GREEN TRIBUNAL, KOLKATA

Appeal No.: 06/2020/EZ

Sanjay Chauhan

Applicant

Vs.

Union of India & Ors.

Respondents

Counter Affidavit on behalf of Respondent No. - 4

Jharkhand State Pollution Control Board in compliance of the order dated 09/07/2024.

I, Kumar Manibhushan, son of Lavlesh Kumar Shahi presently posted as the Environmental Engineer, Jharkhand State Pollution Control Board having its office at T. A. Division Building, H.E.C, Dhurwa, Ranchi and am duly authorized and hereby solemnly state and affirm as follows: -

Authorized under Notaries Act, 1956 by Govt. of Jharkhand, Ranchi (Jharkhand)

38021 OCT 2024

Ref: 2/11/2024

MITHILESH NARAYAN JHA
NOTARY
RANCHI
Reg. No.-
A/AB 22/89
Ranchi, Jharkhand, India

1. That at present, I am working and posted as the Environmental Engineer, Jharkhand State Pollution Control Board having its office at T. A. Division Building, H.E.C, Dhurwa, Ranchi and as such, I am well acquainted with all the facts and circumstances of this case.
2. That I have gone through the order dated 09/07/2024 passed by the Hon'ble NGT, EZB, Kolkata and has understood the contents therein.
3. That, I am authorized to swear this affidavit on behalf of Respondent No. - 4, Jharkhand State Pollution Control Board (JSPCB). Further, it is stated that I have gone through the relevant files and records in the present case.
4. That, it is humbly stated and submitted that Hon'ble NGT, Eastern Zone Bench (EZB), Kolkata vide its order dated 09/07/2024 was pleased to direct the JSPCB to file the additional counter affidavit by answering that the non-complied items have been complied by the Project Proponent or not.



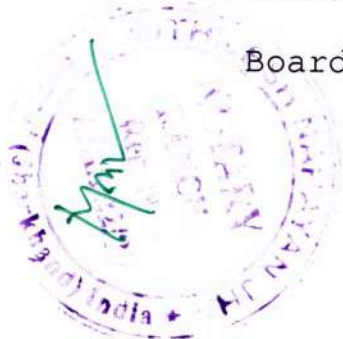
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5. That, it is humbly stated and submitted that in compliance with the directions issued by the Hon'ble NGT the Regional Officer, JSPCB Regional Office cum Laboratory, Hazaribagh has inspected the Unit on 28/08/2024 and submitted the compliance status of the Environmental Clearance (EC) and last Consent to Operate (CTO) issued to the Unit. Inspection report of the same has been submitted vide letter no. 1347 dated 30/08/2024.

Photocopy of the Regional Officer, JSPCB Regional Office cum Laboratory, Hazaribagh letter no. 1347 dated 30/08/2024 is attached herewith as **Annexure - 'A'**.

6. That, it is humbly stated and submitted that certain conditions of Environmental Clearance and Consent to Operate has still not been complied completely by the project Proponent.

7. That, it is humbly stated and submitted that the Board in light of the observed non-compliances of



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the conditions mentioned in the Environmental Clearance and the Consent to Operate has issued a Show Cause Notice to the Unit vide Board's Ref. No. 2228 dated 21/10/2024 to explain the points on the non-compliance on 05/11/2024 before the Board as reported by the Regional Officer, JSPCB Regional Office cum Laboratory, Hazaribagh.

Photocopy of the Board's Ref. No. B - 2228 dated 21/10/2024 is attached herewith as **Annexure - 'B'**.

- 8. That the statement made in forgoing paragraphs is true to my knowledge and the annexure is true copy of its original.
- 9. That this Counter Affidavit is being filed bonafide and in the interest of justice.

Sumo Manibhusan

DEPONENT



M
21/10/2024
NOTARY RANCHI
REGIONAL OFFICE
HAZARIBAGH

Ref. No. 380 Date 21 OCT 2024
Notarized under Notaries Act 1956
& Notary Rules 1956 by Govt. of
Jharkhand, Ranchi

VERIFICATION:

Verified at Ranchi on this theday of 21st October, 2024 that the averments & facts stated herein above are true and correct to my knowledge and belief and nothing material has been concealed therefrom.

Jumas Manibhusan

DEPONENT



पत्रांक...1347

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Annexure-1582

झारखण्ड राज्य प्रदूषण नियंत्रण पर्वद,
क्षेत्रीय कार्यालय-सह-प्रयोगशाला, पी0टी0सी0 चौक, मटवारी रोड, हजारीबाग।

दिनांक...30/08/2024

From,

Jitendra Prasad Singh
Regional Officer

To,

Sri Kumar Manibhushan
Environmental Engineer

Sub : **Inspection Report of M/s Amrapali OCP] At – Honhe, Dist. – Chatra in respect to Compliance of Hon,ble N.G.T., Appeal no. 06/2020/EZ (I.A. no. 06/2023/EZ), its order dated 09.07.2024 in the matter of Sri Sanjay Chouhan vs. Union of India & Ors.**

Sir,

Please find enclosed here with the inspection report of M/s Amrapali OCP, At – Honhe, Dist. – Chatra. The site was visited on 28.08.2024 by Officials of JSPCB, Regional Office, Hazaribagh In respect to Compliance the direction of Hon'ble NGT Appeal no. 06/2020/EZ (I.A. 06/2023/EZ), Its order dated 09.07.2024 in the matter of Sri Sanjay Chouhan vs. Union of India & ots.

This is for information & necessary action.

Encl. – As Above

Your Faithfully

Jpss
30.08.2024
(Jitendra Prasad Singh)
Regional Officer

Authorised under Notaries Act 1956 by Govt. of Jharkhand





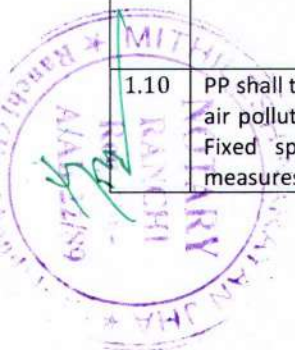
झारखण्ड राज्य प्रदूषण नियंत्रण पर्वद,
क्षेत्रीय कार्यालय-सह-प्रयोगशाला, पी0टी0सी0 चौक, मटवारी रोड, हजारीबाग।

Inspection report M/s Amrapali OCP, At- Honhe, PO-Hone, Dist- Chatra in the light of Hon'ble NGT Appeal no. 06/2020/EZ (I.A. No. 06/2023/EZ), Its order dated 09.07.2024 in the matter of Sri Sanjay Chouhan Vs. Union of India & ors.

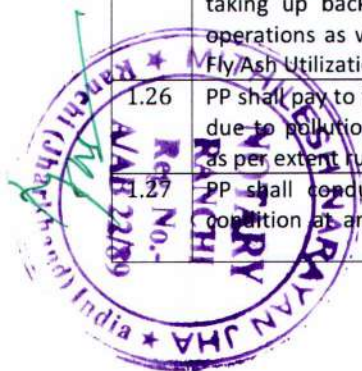
The inspection was carried out by Regional Officer with Junior Environmental Engineer on dated 28.08.2024 in the presence of Sri A.K. Singh, GM, A-C Area, CCL. The unit was found operative during inspection. CTO has been granted by the board vide ref no. JSPCB/HO/RNC/CTO-18627148/2024/372 Dated: 2024-03-08 valid up to 28.02.2025 with certain conditions. The compliance status of EC and CTO conditions are follows:-

Compliance of EC Vide Letter No J-11015/109/2003-IA. II (M) Dated 05.02.2024 in respect of Amrapali Opencast Coal Mine (24.19 MTPA) of Amrapali & Chandragupta Area, CCL in an area of 619.87 Ha.

SL NO	Specific Conditions	Compliance
1.1	PP to obtain the CTO for Opencast coalmine capacity of 24.19 MTPA (Stage-1 20% expansion) after grant of EC.	CTO has obtained upto 28.02.2025.
1.2	PP should complete the coal transportation from Amrapali railway siding through belt conveyor before January 2025 and SPCB shall issue CTO accordingly.	Construction of Amrapali Railway Siding started on non- forest area. Stage-I forestry clearance has been obtained for construction of Amrapali Railway Siding on forest land. Copy of Stage-I forestry clearance is attached as Annexure 1
1.3	PP should complete the ongoing construction work of pucca road from the project area to Shivpur Railway siding, along with installation of windscreen on both sides of this road to be completed before January, 2024.	Pucca road to Shivpur Siding 90% completed. Rest 10 % is incomplete due to local hinderance as reported by P.P. Wind Screen at road passing by Honhe village has been provided along village side. Photographs of Wind Screen is attached on Annexure-2
1.4	PP shall setup environmental laboratory at project site and detail of its Environment Management Cell with their qualification to be submitted to IRO, MoEF&CC.	The P.P has informed that they have agreement with M/s CMPDIL for monitoring of Environmental parameters of Coal mines under C.C.L.
1.5	PP shall install 3 nos. of CAAQMS and share online data to CPCB/SPCB along with install digital display board for displaying the air quality data at the Main gate of ML area.	01 CAAQMS is functional at Project Office, Amrapali OCP & 01 CAAQMS is in operation in buffer zone at village Kundi. For installation of 3 rd CAAQMS budget has been allocated as informed by P.P. 01 PM10 Analyzer is in operation at Shivpur Siding.
1.6	PP shall construct dedicated concrete road of 3.3 km length for transporting Coal.	3.3 KM road is included in total transporting road length of 9.0 KM and is concreted.
1.7	PP shall implement 2 nos, of Road Sweeping Machines on the Road through which coal will be transported by June, 2024.	Tender floated for 02 nos Road Sweeping Machines as informed by PP. Copy annexed at Annexure-3
1.8	PP shall setup 2 nos. of wheel washing system on the route of coal transportation for washing the wheels of loaded coal trucks and unloaded trucks by March, 2024.	01 number of Wheels washing platform is operational in Amrapali Project. P.P. has directed to setup this wheel washing system in route to coal transporting road. One other wheel washing system is under tendering process.
1.9	PP shall install 10 nos. of sensor-based Fog Canons on the route of coal transportation by February, 2024 so that the unnecessary use of water will be minimized.	Sensor based fog cannons on the route of coal transportation not installed. But 05 trolley mounted Fog Cannon installed in Amrapali Project out of which 02 number trolley mounted Fog cannon installed at Shivpur Siding, whereas twotrolley mounted fog cannons have been installed at Coal stockyard and 01 trolley mounted Fog Cannon Near Weighbridge.
1.10	PP shall take all necessary mitigation measures to reduce the air pollution load adjacent to the Honhe village by installing Fixed sprinkling system and by taking other necessary measures.	Fixed water sprinkler in 2km length adjacent to Village Honhe installed. wind screen also installed adjacent to Village Honhe.



1.11	PP should submit the status of implementing of Fog canon, Mist spray system Mobile tankers, and water sprinkling system.	5- Fog Cannon, 5- water tankers (28 KL capacity), 18- contractual water tankers of 12 KL & 20KL capacity, Further installation of Fixed Sprinkler in 6.2 KM under approval stage.
1.12	PP should construct 5 nos of additional check dams at their respective sites to arrest erosion of the soil within the ML area.	Construction of additional 05 nos check dam is under approval stage.
1.13	PP shall complete the installation of roof top rain water harvesting system at the 11 identified locations.	Complied. Photographs attached as Annexure 4
1.14	PP should maintain 100m of safe distance from the mine as well as from the OB dump site all along 1500m length of Dudhmatiya stream.	A 100m of safe distance from the mine as well as from the OB dump site all along 1500m length of Dudhmatiya stream has been maintained.
1.15	PP should regularly inspect and monitor the site of Toe Wall and Garland Drain for maintenance purposes.	The PP has informed that they regularly inspect and monitor the site of Toe Wall and Garland Drain for maintenance purposes.
.16	PP should create the additional pond for fulfilling the water demands of local villagers.	Fund has been provided for additional 5 No. of pond as informed by P.P.
1.17	PP shall obtain the separate CTO from SPCB for sewage treatment plant to be installed in the proposed Township.	CTO for operating the Mines has been obtained. CTE for STP has been obtained. CTO of STP will be obtained after completion of STP. Township at Honhe is under construction.
1.18	PP to address the issues of local public with sufficient budgetary provisions as a part of public hearing. The maintenance of all public hearing activities shall be covered through recurring cost, which will be part of CSR budget.	Being Complied.
1.19	PP to address activities wise budget of Rs. 3672.66 Lakhs in addition to Rs. 266 lakhs for EMP in time bound. The details of annual expenditure shall be part of report submitted to IRO. MoEF&CC. PP needs to include the audited figures against the expenditure and activities to be monitored through dedicated online monitoring mechanism. The maintenance of all activities shall be covered through recurring cost, which will be part of CSR budget.	Being Complied.
1.20	PP shall establish Environmental laboratory at project site by March 2024 and create Environmental Management Cell to monitor the issues related environmental degradation.	Environment Lab not installed at project site. But it has agreement with CMPDIL for monitoring of Environmental Parameters. Environmental Cell established. Copy enclosed as Annexure -5
1.21	PP shall treat the mine water with analytical reports before use by the local villagers.	Mine water used only for sprinkling purpose.
1.22	PP shall deploy the truck size of upto 40 tonnes (payload) for transportation of coal within the mine area through dedicated haul road till implementation of in pit belt conveyor system. SPCB shall monitor the coal transportation by road or rail and CTO to be issued accordingly.	40 Tonnes pay load trucks used for transportation of coal. Jan' 25 has been fixed as completion date of conveyor belt.
1.23	No coal transportation shall be done through sensitive locations such as villages, hospitals, schools etc.	Coal transportation route is from Honhe to Shivpur siding road for which Final Stage-II approval has been obtained from MoEF&CC and this route is not passing through sensitive locations.
1.24	PP shall deploy at least 20% of overall fleet site 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.	Electric /CNG/LNG based vehicles not found in transportation of coal. 5 E-car provided for workers & staff. Other 05 E-caris under procurement stage.
1.25	PP shall conduct feasibility studies for assessment of voids for backfilling of ash and mixing of ash with overburden, taking up backfilling ash and OB mixing activities during operations as well as post closure of mines in line with the FlyAsh Utilization Notification, 2021.	Agreed
1.26	PP shall pay to farmers of agricultural land if there is any loss due to pollution found by concerned District Commissioner as per extent rules or norms.	In case of Amrapali project no such loss due to pollution found by concerned District Commissioner till date as informed by unit.
1.27	PP shall conduct third party audit of compliance of EC condition at an interval six months and its report shall be	For third party audit of compliance of EC condition work has been awarded to NEERI, Nagpur as informed by PP.

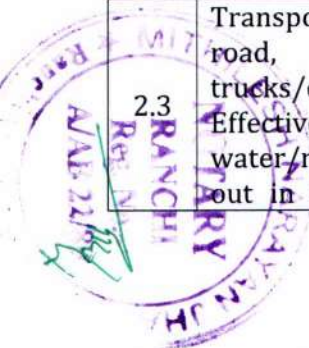


	submitted to IRO, MoEF&CC.	
1.28	PP shall ensure the compliance of expenditure to be incurred for wildlife conservation plan submitted to the State Govt. and the details expenditure shall be submitted with six monthly EC compliance report to Ministry's IRO. Also, PP shall engage State Biodiversity Authority and local biodiversity committee for implementation of CSR activity for developing the local market.	Wild Life Conservation Plan has been approved by PCCF, Wildlife Ranchi on dated 22/03/2024 with a total budget of 52.65 crore. Payment is under process as informed by P.P.
1.29	PP shall submit the video footage and photographs after completion of above EC conditions within 2 months to record the dumpsite, status of plantation, construction of boundary wall, construction of embankment, Installation of ETP and CAAQMS.	Being Complied. Photographs attached on Annexure 6
1.30	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."	CCL has Public Grievance Redressal and Monitoring System called as SAMADHAN at Project, Area and HQ level as informed by P.P. The link is given below:- https://www.centralcoalfields.in/ind/index_h.php
1.31	PP shall raise green belt along borders with village to mitigate pollution and create additional natural wind breaks. Help of a forestry organization of MoEF&CC may be taken (e.g. ICFRE).	Being Complied Total 1,18,759 saplings have been planted in different location in Amrapali Project from 2015 to 2024 including 5000 nos of Bamboo sapling and 1000 fruit bearing planted in FY 2024-25. Further proposed plantation in 2024-25 is 1,00,000 saplings at backfilled area by IFP Ranchi through Miyawaki method as informed by PP.

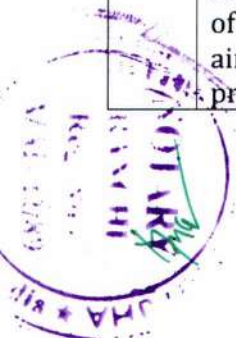
Standard EC Conditions		
SN	Specific Condition	Compliance
1. Statutory Compliance		
1.1	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project	The total project area of Amrapali OCP is 619.87 Ha out of which the total Forest land is 531.64 Ha that has been granted stage-II clearance vide no FL-08/48/2008/FC Dated 12.10.2010. Coal transportation route is from Honhe to Shivpur siding by concrete road for which Final Stage-II approval has been obtained from MoEF&CC.
1.2	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	This condition is not applicable for Amrapali OCP as informed by PP
1.3	The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan/Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of Schedule-I species in the study area).	Wild Life Conservation Plan has been prepared & approved by PCCF.



1.4	The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/Committee.	CTE granted vide letter no-18245305/2024/87 dated 29/02/2024. CTO granted vide letter no-18627148/2024/372 dated 08/03/2024 valid till 28/02/2025.
1.5	The project proponent shall obtain the necessary permission from the Central Ground Water Authority.	Complied. Copy of NOC from CGWA attached as Annexure -7
1.6	Solid/hazardous waste generated in the mines need to be addressed in accordance to the Solid Waste Management Rules, 2016/Hazardous & Other Waste Management Rules, 2016.	Complied. Hazardous waste Authorization is obtained. Copy attached as Annexure-8
1.7	Permission of power supply to be taken from the concerned authority for meeting power demand of the project site.	Complied.
1.8	The maximum production or peak production at any given time shall not exceed the limit as prescribed in the EC.	Complied. Production figure of last FY is attached as Annexure-9
1.9	Validity of Environment Clearance is as per life of the mine mentioned in EC letter or 30 years as per EIA Notification, 2006 and its amendments therein	Acceptable.
1.10	All the conditions stipulated in previous Environment Clearance conditions should be strictly complied within certain timeline	Being Complied
2. Air quality monitoring and preservation		
2.1	Continuous ambient air quality monitoring stations as prescribed in the statute to be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely 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. Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring stations as per the requirement and/or in consultation with the SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least once in six months.	2 CAAQMS has been installed. 1 PM 10 analyzer has been installed. Installation of 1 CAAQMS is under proposal.
2.2	The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.	Being Complied. Copy of Ambient Air Quality and heavy metals is attached as Annexure- 10
2.3	Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water/mist sprinkling/rain gun etc shall be carried out in critical areas prone to air pollution (with	Transportation of Coal to Phulbasia, CHP- Piparwar and other location is done through covered vehicles. Internal transportation to Shivpur siding is not found through covered vehicles.



	higher values of PM10/PM25) such as haul road, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.	The PP has been directed to cover the vehicles transporting coal to Shivpur siding as well.
2.4	The transportation of coal shall be carried out as per the provisions and route envisaged in the approved Mining Plan or environment monitoring plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed so that the impact of sound, dust and accidents could be appropriately mitigated.	Being Complied.
2.5	PP to install solar lights along the road used for transportation of coal to avoid the accidents at night and seek its maintenance.	PP has informed that total 12 number of solar lights has proposed to set up along the road used for transportation of coal to avoid the accidents at night. It is under tendering process.
2.6	Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining PUC certificate from the authorized pollution testing centres.	Being Complied. Some PUC attached as Annexure-11
2.7	Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.	a timeline of 18 months has been given from May 2023 to January 2025 vide EAC of 05 th April 2023 for construction of CHP, Silo and Completion of Amrapali Railway Siding work. Work awarded for construction of CHP and Silo to M/s SK Samanta on 7th Feb 2024. Construction work of Amrapali Railway Siding in non-forest land is in progress.
2.8	Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmentally friendly sustainable technology should be implemented for mitigating such parameters.	A timeline of 18 months has been given from May 2023 to January 2025 vide EAC of 05 th April 2023 for construction of CHP, Silo and Completion of Amrapali Railway Siding work. Work awarded for construction of CHP and Silo to SK Samanta on dated 7 Feb 2024.
2.9	Adequate measures on EMP should be analyzed on annual basis to assess the trend of air pollution data from continuous monitoring station and quarterly report shall be generated and submitted with 6 monthly compliance reports to RO, MOEF&CC.	Assure to comply.
2.10	Effective safeguard measures for prevention of dust generation and subsequent suppression like regular water sprinkling shall be carried out in areas prone to air pollution. The Fugitive dust emission from all sources shall be regularly controlled by installation of required equipment's. It should be ensured that air pollution level confirm to the standards prescribed by the MOEFCC/CPCB.	5- trolly mounted Fog Cannon, 5- water tankers (28 KL capacity), 18- contractual water tankers of 12 KL & 20KL capacity have been procured for wetting of transportation road and haul road. Fixed Sprinkler in 4.8 Km has been installed. Further, Installation of Fixed Sprinkler in 6.2 KM is under approval stage.



2.11	Adequate number of Fog canon (mist sprayer) shall be installed to reduce the impact of air pollution at dust generating sources with time bound action plan.	Total 05 Trolley mounted Fog Cannon installed in Amrapali Project out of which 02 number trolley mounted Fog cannon installed at Shivpur Siding, whereas two trolley mounted fog cannons have been installed at Coal stockyard and 01 trolley mounted Fog Cannon Near Weighbridge.
2.12	PP should Install Wind breaker/shield arrangement along the railway siding for reducing the dust propagation in upwind direction.	Being Complied
2.13	Post environmental closure third party monitoring by reputed instituted in air quality, water, land & solletc shall be carried out and analysed with EMP measures at regular interval. A suitable recommendation in this regard, shall be furnished to IRO, MoEF&CC for compliance. The data used for analysis shall be obtained from continuous AQMS, site specific water regime. Also, third party shall analyse the implementation of river diversion, meeting to the requirement of project report.	Agreed
2.14	Comparison of average monthly temperature of pre and post mine operation after obtaining EC shall be elaborated for post three years and a record to be maintain at regular interval.	Agreed

1. Water quality monitoring and preservation

3.1	The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board.	The effluent discharge (mine waste water, workshop effluent) is being monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board. Copy attached as Annexure-12
3.2	The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No.J-20012/1/2006-IA.11 (M) dated 27th May, 2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.	The monitoring data is being uploaded on the company's website. The link is as follows: - https://www.centralcoalfields.in/sutbs/envrfrst.php .
3.3	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e., pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.	04 Piezometer installed in different locations of Amrapali project. Piezometers are connected with telemetry system with link http://www.senseindiatech.com/iotportal/subadmin/ and user name : - piezometer3@cclamrapali.com and Password: - ccl@2023.
3.4	Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data	Monitoringreport of water quality upstream and downstream of water bodies attached as Annexure: -5



	shall be maintained and submitted to the Ministry of Environment, Forest, and Climate Change/Regional Office.	
3.5	Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.	Being Complied.
3.6	Catch and/or garland drains and siltation ponds in adequate numbers and appropriate size shall be constructed around the mine working, coal heaps & OB dumps to prevent run off of water and flow of sediments directly into the river and water bodies. Further, dump material shall be properly consolidated/ compacted and accumulation of water over dumps shall be avoided by providing adequate channels for flow of silt into the drains. The drains/ponds so constructed shall be regularly desilted particularly before onset of monsoon and maintained properly. Sump capacity should provide adequate retention period to allow proper settling of silt material. The water so collected in the sump shall be utilised for dust suppression and green belt development and other industrial use. Dimension of the retaining wall constructed, if any, at the toe of the OB dumps within the mine to check run-off and siltation should be based on the rainfall data. The plantation of native species to be made between toe of the dump and adjacent field/ habitation/water bodies	
3.7	Adequate groundwater recharge measures shall be taken up for augmentation of groundwater. The project authorities shall meet water requirement of nearby village(s) after due treatment conforming to the specific requirement (standards).	2 numbers of RO plant have been provided for supply drinking water to nearby villagers.
3.8	Industrial waste water generated from CHP, workshop and other waste water, shall be properly collected and treated so as to conform to the standards prescribed under the standards prescribed under Water Act 1974 and Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time. Adequate ETP /STP needs to be provided.	ETP for workshop has been installed. STP is under construction for colony. CHP not installed yet.
3.9	The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz. watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.	Being Complied.
3.10	The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations, considering the presence of river/rivulet/ pond/lake etc, shall be prepared and implemented by the project proponent. The surface drainage plan and/or any diversion of natural watercourses shall be as per the approved Mining Plan/EIA/EMP report and with due	Being Complied

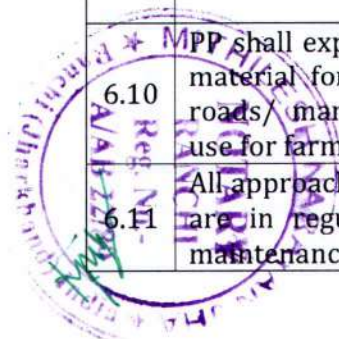


	approval of the concerned State/GoI Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved Mining Plan and as per the permission of DGMS or any other authority as prescribed by the law.	
3.11	The project proponent shall take all precautionary measures to ensure riverine/riparian ecosystem in and around the coalmine up to a distance of 5 km. A riverine /riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.	A riverine /riparian ecosystem conservation and management plan has been prepared and is being implemented. Copy attached as Annexure - 13
3.12	Quality of polluted water generated from the operations which include COD and acid mine drainage and metal contamination shall be monitored along with TDS, DO, TSS. The monitored data shall be uploaded on the website of the company as well as displayed at the site in public domain.	Complied
3.13	Domestic water shall be providing to the residents/villages which are coming under the zone of influence of the project due to ground water extraction and mining operation by installing adequate number of RO plants with proper supply line and taps within 2 years	02 Nos of RO plants have been installed for the villagers of Kumarangkalan, ursu& nearby for drinking purpose.
3.14	No obsolete technologies for sewage treatment shall be implemented. Construction of Sewage Treatment Plant with latest technology should be completed within 2 years and treated water shall be reused for plantation. CTE and CTO of STP shall be obtained as per the norms.	MBBR based STP is under construction stage for which CTE has already been obtained.
2. Noise and Vibration monitoring and prevention		
4.1	Adequate measures shall be taken for control of noise levels as per Noise Pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipment (PPE) like ear plugs/muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.	Personal Protective equipment (PPE) like ear plugs/muffs in conformity with the prescribed norms and guidelines has been provided to workers
4.2	Controlled blasting techniques shall be practiced in order to mitigate ground vibrations, Fly rocks, noise and air blast etc., as per the guidelines prescribed by the DGMS.	Noise Level Monitoring report is attached as Annexure -5
4.3	The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.	Noise Level Monitoring report is attached as Annexure -5
3. Mining Plan		
5.1	5 Star Rating is mandatory to obtain certification as	Copy of 5star rating is attached as

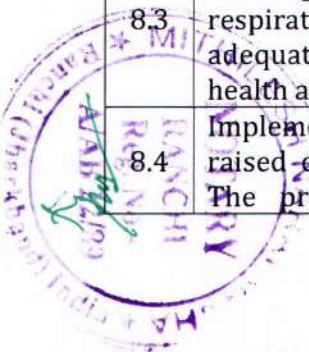
	per guidelines of Ministry of Coal.	Annexure - 14
5.2	Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there under as applicable.	Mining is being done as per DGMS guideline.
5.3	Mining shall be carried out as per the approved mining plan (including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS)	Being Complied.
5.4	No mining shall be carried out in forest land without obtaining forestry clearance as per Forest (Conservation) Act, 1980.	Mining is restricted only over an area of 531.64 Ha diverted forest land.
5.5	Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.	Being Complied
5.6	PP shall adopt mining method by preferably using surface miners for the project and silo loading through in - pit conveyor should be adopted.	05 number surface miner is engaged in mining operation.
5.7	Transportation of coal till Railway Siding shall be developed to avoid transportation through Road.	A timeline of 18 months has been given from May 2023 to January 2025 vide EAC of 05 th April 2023 for construction of CHP, Silo and Completion of Amrapali Railway Siding work. Construction work of Amrapali Railway Siding in non-forest land is in progress as informed.
4. Land Reclamation		
6.1	Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest, and Climate Change(MOEFCC) from time to time shall be submitted to MOEFCC/Regional Office (RO).	Digital Survey of entire core zone using Satellite Remote Sensing survey is being carried out in year 2021.
6.2	The final mine void depth should preferably be as per the approved Mine Closure Plan, and in case it exceeds 40 m, adequate engineering interventions shall be provided for sustenance of aquatic life therein. The remaining area shall be backfilled and covered with thick and alive topsoil. Post-mining land be rendered usable for agricultural/forestry purposes and shall be diverted. Further action will be treated as specified in the guidelines for Preparation of Mine Closure Plan issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.	Agreed.
6.3	The entire excavated area, backfilling, external OS dumping (including top soil) and afforestation plan shall be in conformity with the "during mining"/"post mining" land- use pattern, which is an integral part of the approved Mining Plan and the EIA/EMP submitted to this Ministry. Progressive compliance status vis-a-vis the post mining land use	Being Complied



	pattern shall be submitted to the MOEFCC/RO.	
6.4	Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, along with fly ash for external dump of overburden, backfilling of mines.	At present there is no fly ash dumping in the project as informed by P.P.
6.5	Further, it may be ensured that as per the time schedule specified in mine closure plan it should remain live till the point of utilization. The topsoil shall temporarily be stored at earmarked site(s) only and shall not be kept unutilized. The topsoil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilised with native grass species to prevent erosion and surface run off. The other overburden dumps shall be vegetated with native flora species. The excavated area shall be backfilled and afforested in line with the approved Mine Closure Plan. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change/ Regional Office.	Being complied. Total 1,18,759 saplings have been planted in different location in Amrapali Project from 2015 to 2024. 5000 nos of Bamboo sapling and 1000 fruit bearing planted in FY 2024. Proposed Plantation in 2024 is 100000 saplings at backfilled area by IFP Ranchi through Miyawaki method has been approved by HQ.
6.6	The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.	Agreed At present, there is no grazing land is involved in the project area of 619.87 Ha.
6.7	Top soil should be stored separately at marked area and necessary vegetation shall be maintained to avoid any entrainment of dust.	Being Complied
6.8	Progressive backfilling of mine and progressive reclamation of OB dump shall be done.	Being complied
6.9	Active OB Dump should not be kept barren/open and should be covered by temporary grass to avoid air born of particles.	Grass matting have been done on Honhe O/B dump. Proposed Plantation in 2024 is 100000 saplings at backfilled area by IFP Ranchi through Miyawaki method at OB dump has been approved by HQ as informed by P.P.
6.10	MPP shall explore the possibilities of utilization of OB material for different purposes (in construction of roads/ manufacture of artificial sand, aggregates/ use for farmers etc.)	It is being explored.
6.11	All approach roads to mine and all other roads which are in regular use should be black topped. The maintenance of road shall be done by PP in	9.0 KM out of total transportation road of 9.8 KM is PQC. Construction of rest 800 m road will be done soon as



	collaboration with state government.	informed by PP.
6.12	Hon'ble Supreme Court in an Writ Petition(s) Civil No. 114/2014, Common Cause vs Union of India &Ors vide its judgement dated 8th January, 2020 has directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental clearance and the mining plan to the effect that the mining lease holders shall, after ceasing mining operations, undertake re- grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent". The implementation report of the above said condition shall be sent to the Regional Office of the MoEF&CC.	The PP has assured to follow the direction.
5. Green Belt		
7.1	The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered/endemic flora/fauna, if any, spotted/reported in the study area. The Action plan in this regard, if any, shall be prepared and implemented in consultation with the State Forest and Wildlife Department.	Wild Life Conservation plan has been prepared and approved on 22.03.2024. The PP has assure to take all steps for conservation and protection of flora/fauna.
7.2	Greenbelt consisting of 3-tier plantation of width not less than 7.5 m shall be developed all along the mine lease area as soon as possible. The green belt comprising a mix of native species (endemic species should be given priority) shall be developed all along the major approach/ coal transportation roads.	Being complied.
6. Public hearing and Human health issues		
8.1	Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry &it's RO on six-monthly basis.	Being complied
8.2	The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time.	Complied
8.3	Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.	Training is being given to workers and PPE kit provided to workers as reported by PP.
8.4	Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the	Being Complied

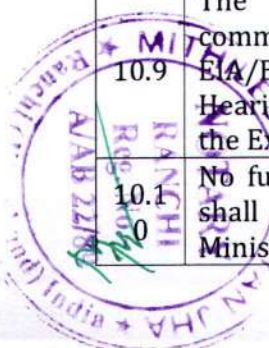


	tasks/measures as per the action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.	
8.5	The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-1A.11 (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.	Mitigation measures is being followed
8.6	PP to conduct need-based assessment survey of the area to for in order to decide the activities to be carried under the CSR and to provide detail of the activity carried out with adequate budgetary provision and time bound action plan.	Need-based assessment survey of the area has been completed and accordingly action plan prepared. Copy of action plan attached as Annexure 15
8.7	PP should conduct epidemiology study to (analysis of the distribution, patterns and determinants of health and disease conditions in defined populations).	epidemiology study not conducted but regular medical camp is being organized.
8.8	Permanent Health care facilities of Hospital should be established within 5 km of project boundary for the local people.	Hospital constructed but not in operation. Dispensary near Honhe Village is in operation.
8.9	PP must ensure an emergency action plan during pandemic in order to provide assistance to the nearby villages located within the 10 km radius buffer zone (If required)	
8.10	PP is asked to also identify the rural areas for installation of solar light with its maintenance within the study area of 10 km radius buffer zone within one year	12 No. of Solar light is under tendering process for road used for transportation of Coal.
8.11	PP to take measure for installation of Renewable Energy sources in nearby area falling within 10 km radius	
8.12	The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.	Noise Level report has been submitted by PP.
8.13	Adequate facility of drinking water, plantation and other social amenities should be provided to established R&R villages.	Complied.
8.14	Persons of nearby villages shall be given training on livelihood and skill development to make them	Training on livelihood and skill development is being given to

	employable with its proper records.	nearby villagers.
8.15	Compensation of the land acquired for the project shall be settled as per the R&R Policy within fixed timeline.	Being Complied.
7. Corporate Environment Responsibility		
9.1	The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/forest /wildlife norms/conditions. The company shall have defined system of reporting infringements/ deviation/ violation of the environmental/forest/wildlife norms/ conditions and/or shareholders/stake holders.	C.C.L. has a well laid down Environmental policy duly approved by the Board of directors. Copy enclosed.
9.2	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.	Complied.
9.3	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.	Action Plan prepared and approved. Separate account for Environmental protection Measures provided.
9.4	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	Not complied.
9.5	PP should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground. A dedicated team to oversee environment management shall be setup which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis. Any non-compliance or infringement should be reported to the concerned authority.	It has agreement to carry out environment monitoring with CMPDIL. Proposal for setting up Env. Lab at Amrapali OCP is under approval Stage.
8. Miscellaneous		
10.1	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website	Complied Environment clearance letter has been uploaded on CCL Web Site. The link of the same is given below: https://www.centralcoalfields.in/sutbs/envr_clrnce.php



	permanently.	The EC was also advertised in two local newspapers on 11.02.2024.
10.2	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	Complied The copy of environmental clearance has been submitted to head of Panchayats of Project Affected Villages informed by PP.
10.3	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half yearly basis.	Complied The status of compliance is being uploaded on CCL website along with results of monitored data. The web-link is given below: https://www.centralcoalfields.in/sutbs/six_mnthly.php
10.4	The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.	Complied.
10.5	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	Being Complied
10.	The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.11 (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.	Mitigation measures is being followed.
10.6	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	Complied
10.7	The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.	Complied
10.8	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	Agreed with the direction
10.9	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	Agreed
10.10	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate	Complied



	Change.	
10.1 1	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Agreed to adhere with the direction.
10.1 2	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Agreed
10.1 3	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Agreed
10.1 4	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.	Agree to extend full cooperation to the officers by furnishing the required data.
10.1 5	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans- boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.	Agree to abide by the direction.



SL	Special Conditions	Compliance
1	That, the occupier shall operate and maintain the systems for online monitoring of ambient air quality and continuous mine water discharge quality with connectivity to Jharkhand State Pollution Control Board and CPCB server.	CAAQMS has been installed. But the value of PM 2.5 was displaying 1000.00 ug/Nm ³ . The P.P. informed that due to electric supply disruption, error is seen.
2	That, the occupier shall install, operate and maintain facilities to dispose of carbonaceous hazardous and non-hazardous solid wastes for co-processing in high temperature kilns/ furnaces and shall dispose of non carbonaceous hazardous wastes to TSDF and shall use non-carbonaceous non-hazardous solid wastes or mine overburden as a substitute of live soil or as a land fill as and where applicable.	Being Complied
3	That, the occupier shall make arrangement of transportation of ROM to the railway siding or coal washery by pneumatic conveyer fully covered all along its way.	Transportation of coal through covered vehicles is being done to Phulbasia Siding. Transportation of Coal is also done through Shivpur Siding which is about 7.0 KM from the coal mines through forest area for which forestry clearance of 8.38 ha has been obtained. The P.P. were directed to ensure the covering of vehicles transporting coal to the Shivpur siding as well. A timeline of 18 months has been given from May 2023 to January 2025 vide EAC of 05th April 2023 for construction of CHP, Silo and Completion of Amrapali Railway Siding work at Amrapali as informed by PP.
4	That, the occupier shall ensure the transportation of the ROM & OB through fully mechanically covered transport vehicles and in case of contractual transportation an agreement shall be made with the transporters mentioning contract of transport of materials shall be terminated with immediate effect if any vehicle at any point of time during the transportation of materials be found uncovered.	Complied. Copy of contract has been enclosed at Annexure:- 16
	That, the occupier shall shift/keep OB dump(s) to grey land and at least 100 meter away from river / stream/water body.	Complied OB dump is 100 meter away from Barki River.



6	That, the occupier shall maintain toe wall and garland drain around OB dump(s) with pucca sumps having pumping back arrangement of settled run off to prevent carryover of soil and dirt with runoff into nearby water body/ stream.	Complied
7	That, the occupier shall make separate arrangement for proper storage of live soil obtained during removal of OB from the mine and reclaim de-coaled area with mine OB.	Being Complied
8	That, the occupier shall construct and maintain catch drain, siltation pond retaining wall of appropriate size to arrest silt & sediment flows from soil, OB dump and mineral dump.	Being Complied
9	That, the occupier shall establish well equipped environmental laboratory with facilities to monitor at least all regulatory parameters.	Environmental Laboratory is not established. The P.P. has informed that they have agreement with CMPDIL for monitoring of all coal mines of C.C.L.
10	That, the occupier shall operate crushers at CHP with high efficiency bag filters, water sprinkling system to check fugitive emission.	CHP is not installed yet.
11	That, the occupier shall reclaim mined out areas with OB and shall plant trees on them.	In Monsoon 2021, Plantation work in 23 Ha Backfilled area by planting 57500 saplings completed by State Forest Department.
12	That, the occupier shall operate & maintain ETP with workshop of heavy vehicles.	ETP is installed at workshop.
13	That, the occupier shall ensure washing of tyres of vehicles used for transportation of coal and also ensure proper covering of the same to avoid any dust emission.	One number wheel washing platform has been installed. The P.P. has been directed to ensure covering of vehicles engaged in transportation to Shivpur Siding also. Photographs of wheel washing attached as Annexure-17
14	That, this CTO will be valid subject to any further direction made by MoEF and CC in the reference to the letters communicated.	Agreed
15	That the occupier shall submit half yearly compliance report from the date of order/judgement passed by the Hon'ble NGT (EZ) Kolkata in OA. No. No.28/2020/EZ.	Being Complied.
16	That the occupier shall ensure that coal transportation from Amrapali Railway Siding through belt conveyor and silo loading system.	A timeline of 18 months has been given from May 2023 to January 2025 vide EAC of 05th April 2023 for construction of CHP, Silo and Completion of Amrapali Railway Siding work as informed by the



		PP.	
17	That, the occupier shall operate and maintain the CAAQMS and PM 10 analyser with CPCB approved technology and USEPA certification and ensure data transmission to CPCB and JSPCB server.	CAAQMS installed at Project Office Amrapali. PP informed that due to electric supply disturbance, error found in PM 2.5 data. It will be corrected after 1 hour of regular operation.	
18	That, the occupier shall obtain authorization under HoWM Rules' 2016.	Hazardous waste Authorization obtained.	
19	That, this CTO is subject to any further order/decision taken by concerned authority.	Agreed	
20	That, the occupier shall submit compliance status of EC conditions on six monthly basis to the Board and other relevant organisation as applicable.	Being Complied.	
21	That the Occupier shall submit compliance of this CTO conditions alongwith compliance of EC conditions	Agreed	
22	That, this CTO supersedes the CTO granted earlier vide ref no JSPCB/HO/RNC/CTO-15497894/2023/1174 dated 30.06.2023	Agreed.	
23	That, the occupier shall submit application for renewal of consent under section 25/26 of the Water (prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (prevention & Control of Pollution) Act, 1981 again 120 days prior to the date of expiry of this consent with requisite fee and documents showing compliance of all the above condition.	CTO is valid up to 28.02.2025.	



General Conditions

SN	Conditions				Status	
1.	The occupier shall maintain the National ambient air quality standard given below-				AAQ report is being submitted.	
	S N	Pollutants	Time Weighted Average	Concentration in Ambient Air		
				Industrial, Residential, Rural and Other Area		Ecologically sensitive area (notified by Central Govt.)
	(i)	(ii)	(iii)	(iv)		(v)
	1	Sulphur dioxide (SO ₂), µg/m ³	Annual 24 Hours	50 80		20 80
	2	Nitrogen dioxide(NO ₂), µg/m ³	Annual 24 Hours	40 80		30 80
	3	Particulate Matter (size less than 10 µm) or PM ₁₀ , µg/m ³	Annual 24 hours	60 100		60 100
	4	Particulate Matter (size less than 2.5 µm) or PM _{2.5} , µg/m ³	Annual 24 hours	40 60		40 60
	5	Ozone(O ₃) µg/m ³	8hrs 1hrs	100 180		100 180
	6	Lead(Pb) µg/m ³	Annual 24hrs	0.50 1.0		0.50 1.0
	7	Carbon monoxide(CO) mg/m ³	8hrs 1hrs	02 04		02 04
	8	Ammonia(NH ₃) µg/m ³	Annual 24hrs	100 400		100 400



9	Benzene(C6H6) µg/m3	Annual	05	05																
10	Benzo(a)Pyren e (BaP)particulat e phase only µg/m3	Annual	1	1																
11	Arsenic (As) µg/m3	Annual	06	06																
12	Nickel (Ni) µg/m3	Annual	20	20																
Note; SN 1to4- Mandatory SN 5 to 12-As applicable for specific type of industry																				
2	That the occupier shall maintain the emission quality within the standard and the quantity, as follows-				Being Maintained.															
<table border="1"> <thead> <tr> <th>SN</th> <th>Parameter</th> <th>Standard</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>ParticulateMatter</td> <td>150micro-gram/Nm3</td> </tr> </tbody> </table>						SN	Parameter	Standard	1	ParticulateMatter	150micro-gram/Nm3									
SN	Parameter	Standard																		
1	ParticulateMatter	150micro-gram/Nm3																		
3	That the occupier shall keep the process effluent in close-circuit and the quality of effluent from other sources in conformity with the standard(s) and the discharge quantity as below-				No process effluent generated. Rain water stored in mine pit.															
<table border="1"> <thead> <tr> <th>SN</th> <th>Parameter</th> <th>Standard</th> </tr> </thead> <tbody> <tr> <td>I</td> <td>TotalSuspendedSolid</td> <td>100mg/L</td> </tr> <tr> <td>II</td> <td>BOD</td> <td>30mg/L</td> </tr> <tr> <td>III</td> <td>COD</td> <td>250mg/L</td> </tr> <tr> <td>IV</td> <td>Oil &Grease</td> <td>10mg/L</td> </tr> </tbody> </table>						SN	Parameter	Standard	I	TotalSuspendedSolid	100mg/L	II	BOD	30mg/L	III	COD	250mg/L	IV	Oil &Grease	10mg/L
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III	COD	250mg/L																		
IV	Oil &Grease	10mg/L																		



4	<p>That the occupier shall dispose of solid waste as follows-</p> <table border="1"> <thead> <tr> <th data-bbox="305 376 368 465">SN</th> <th data-bbox="368 376 697 465">Waste Type</th> <th data-bbox="697 376 995 465">Mode of Disposal</th> </tr> </thead> <tbody> <tr> <td data-bbox="305 465 368 723">I</td> <td data-bbox="368 465 697 723">Hazardous Carbonaceous Waste</td> <td data-bbox="697 465 995 723">In co-processing in high temperature furnaces or kilns</td> </tr> <tr> <td data-bbox="305 723 368 869">II</td> <td data-bbox="368 723 697 869">Hazardous Non-Carbonaceous Wastes</td> <td data-bbox="697 723 995 869">In TSD</td> </tr> <tr> <td data-bbox="305 869 368 1126">III</td> <td data-bbox="368 869 697 1126">Non-Carbonaceous Non-Hazardous wastes/Mine Burden</td> <td data-bbox="697 869 995 1126">As a substitute of Soil or mineral.</td> </tr> </tbody> </table>	SN	Waste Type	Mode of Disposal	I	Hazardous Carbonaceous Waste	In co-processing in high temperature furnaces or kilns	II	Hazardous Non-Carbonaceous Wastes	In TSD	III	Non-Carbonaceous Non-Hazardous wastes/Mine Burden	As a substitute of Soil or mineral.	Solid waste i.e. OB is kept in Mines lease area.
SN	Waste Type	Mode of Disposal												
I	Hazardous Carbonaceous Waste	In co-processing in high temperature furnaces or kilns												
II	Hazardous Non-Carbonaceous Wastes	In TSD												
III	Non-Carbonaceous Non-Hazardous wastes/Mine Burden	As a substitute of Soil or mineral.												
5	That the occupier shall keep DG Set(S) within acoustic enclosure(s) and shall keep the height(s) of exhaust pipe(s) as per Central Pollution Control Board Norms	Silent DG Set(S) installed at PO office.												
6	That the occupier shall install and maintain Central Ground Water Board/State Ground Water Directorate approval system of rain water harvesting-cum-ground water recharge and submit the Photographic View of the structures within a month.	Pond and mine pit have been provided for RWH. Further Rooftop RWH system installed at 11 locations in Amrapali Project.												
7	That the occupier shall grow and maintain greenery of the project in the periphery and other available spaces and shall continue enhancing its plant density and Bio-diversity.	About 1,18,759 saplings have been planted in different location in Amrapali Project from 2015 to 2024 as informed by PP.												



	That the occupier shall submit environmental statement with supporting stoichiometric calculations analysis reports every year latest by 30 th September of the next financial year.	Environmental Statement is being submitted. -28-
9	That the occupier shall submit report(s) duly monitored and issued by an NABL accredited/ISO 9001:2008 and OHSAS 18001:2007 Certified Laboratory in compliance sub-para (2), (3), (4) and (5) of paragraph (3) of this CTO yearly as required periodicity.	Monitoring is done by M/s CMPDI Ranchi.
10	That this CTO is valid subjected to the validity of Mining Lease/Mining Plan/Eco Friendly/Environmental Clearance if applicable. In case of no renewal of Mining Lease/Mining Plan this consent shall be treated revoked automatically.	PP has agreed with the direction.
11	That, this CTO is issued from the Environmental angle only and does not absolve the occupier from other statutory obligation prescribed under any other law or any other instrument enforce. The sole and complete responsibility to comply with these conditions laid down in all other laws for the time being in force rests with the Industry/Unit/Occupier.	PP has agreed with the direction.
12	That, this CTO shall not in any way, adversely affect or jeopardized the legal proceeding, if any, instituted in the past or that could be, instituted against you by the State Board for violation of the provisions of the Act or the Rules made there under.	PP has agreed with the direction
13	That the occupier shall comply with all applicable provisions of Water (Prevention & Control Pollution) Act 1974; the Water (Prevention & Control of Pollution) Cess Act, 1977; the Air (Prevention & Control of Pollution) Act, 1981; and the Environment (protection) Act, 1986 and Rules made there under.	Assure to comply.

Manish Kumar
30/08/2024
(Manish Kumar)
J.E.E.

J.P. Singh
30.08.2024
(J.P. Singh)
Regional Office



Annexure:- 1



/63098/2024

/63098/2024



सत्यमेव जयते

भारत सरकार / Government of India
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
Ministry of Environment, Forest & Climate Change
क्षेत्रीय कार्यालय/ Regional Office

पता: द्वितीय तल, झारखण्ड राज्य आवास बोर्ड मुख्यालय, हरमू चौक, राँची, झारखण्ड - 834002
Add: 2nd Floor, Headquarter-Jharkhand State Housing Board, Harmu Chowk, Ranchi, Jharkhand - 834002
Tel: 0651-2410002, 2410007; E-mail: ro.ranchi-mef@gov.in



संख्या : FP/JH/RAIL/36506/2018/50

दिनांक: 17.01.2024

सेवा में,

अपर मुख्य सचिव

वन, पर्यावरण, एवं जलवायु परिवर्तन विभाग
झारखण्ड सरकार,
नेपाल हाउस, राँची - 834002.

विषय:- In-principle (Stage-I) approval of Central Government under Forest (Conservation) Act, 1980 for diversion of 120.61 ha of forest land for construction of Amrapali Railway Siding for evacuation of Coal. The proposal includes the construction of Railway siding, Silo, Belt conveyor and Culvert in District Chatra of Jharkhand – reg.

महाशय,

I am directed to refer to you the Jharkhand Govt. letter No. Van Bhumi-07/2023-4129/Va.Pa./Ranchi dated 02.11.2023 on the above mentioned subject seeking prior approval of the Ministry of Environment, Forest and Climate Change under section 2 of Forest (Conservation) Act, 1980.

After due consideration of the proposal of the State Government and on the basis of decision of Regional Empowered Committee in its 69th meeting, the "in-principle" approval of Central Government, is hereby conveyed for diversion of 120.61 ha of forest land for construction of Amrapali Railway Siding for evacuation of Coal. The proposal includes the construction of Railway siding, Silo, Belt conveyor and Culvert in District Chatra of Jharkhand, subject to the following conditions and stipulations:

- (1) Legal status of the forest land shall remain unchanged.
- (2) **In accordance to Rule 13 and Rule 14 of Van (Sanrakshan & Samvardhan) Rules 2023, user agency shall provide land which is neither notified as forest under relevant forest laws nor managed as forest by State Forest Department for raising compensatory afforestation.**
- (3) Proposed forest land will be handed over to user agency only after adequate non-forest land for the project is handed over to state forest department by the user agency.
- (4) Compensatory afforestation shall be taken up by the Forest Department over matching amount of non-forest land in accordance to Rule 13 (1) or 13 (3) of the **Van (Sanrakshan & Samvardhan) Rules 2023** and user agency shall bear the cost of raising compensatory afforestation on such land. As far as possible, a



mixture of local indigenous & natural species shall be planted and monoculture of any species shall be avoided.

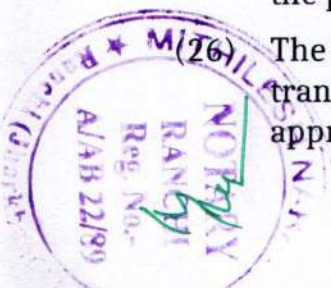
- (5) The non-forest land proposed for CA shall be transferred and mutated in the name of Forest Department and notified as RF/PF prior to Stage-II approval. A copy of the original notification declaring the non-forest land under Section 4 or Section 29 of the Indian Forest Act, 1927, or under the relevant section of the State Forest Act as the case may be, will be submitted by the State Government prior to Stage-II approval.
- (6) The cost of compensatory afforestation on the CA Non-forest land at the prevailing wage rates as per compensatory afforestation scheme (including the cost of survey, demarcation and erection of permanent pillars etc. as required for securing the land against encroachment) shall be deposited in advance with the State Forest Department by the project authority. The CA will be maintained for 10 years. The scheme may include appropriate provision for anticipated cost increase for works scheduled for subsequent years.
- (7) The State Government shall charge the Net Present Value (NPV) for the 120.61 ha forest area to be diverted under this proposal from the User Agency as per the order of the Hon'ble Supreme Court of India dated 30/10/2002, 01/08/2003, 28/03/2008, 24/04/2008 and 09/05/2008 in IA No. 566 in WP (C) No. 202/1995 and as per the guidelines issued by the Ministry vide letters No. 5-1/1998-FC (Pt.II) dated 18/09/2003, as well as letter No. 5-2/2006-FC dated 03/10/2006, 5-3/2007-FC dated 05/02/2009 and **letter No.5-3/2011-FC(Vol-I) dated 6/1/2022** in this regard.
- (8) Additional amount of the NPV of the diverted forest land, if any, becoming due after finalization of the same by the Hon'ble Supreme Court of India on receipt of the report from the Expert Committee, shall also be charged by the State Government from the User Agency. The User Agency shall furnish an undertaking to this effect.
- (9) **The identified trees shall be translocated as per the set standards of the High-Powered Committee constituted in the state of Jharkhand that governs the tree felling.**
- (10) User Agency shall restrict the felling of trees to minimum number in the diverted forest land and the trees shall be felled under the strict supervision and direction of the State Forest Department; the cost of felling of trees shall be deposited by the User Agency with the State Forest Department.
- (11) All the funds received from the user agency under the project shall be transferred / deposited to CAMPA fund only through e-portal (<https://parivesh.nic.in/>).

(12) The FRA certificate as per Ministry's guidelines shall be submitted before the issuance of final approval. The complete compliance of the FRA, 2006 shall be

ensured by way of prescribed certificate from the concerned District Collector.

- (13) **Speed regulating signage will be erected along the railway line at regular intervals in the Protected Areas/ Forest Areas.**
- (14) **The user agency shall do Split-Rail fencing in high track density areas as identified by concerned DFO to save Wild elephants crossing the railway tracks. User agency shall also provide adequate number of appropriate under passes, at locations identified by the concerned DFO, to facilitate safe movement of wild animals in these areas.**
- (15) **As recommended by the Regional Empowered Committee (REC), an Integrated Wildlife Management Plan (IWMP), for areas inclusive of mine-areas in the vicinity, shall be prepared at project cost and the same shall approved by the PCCF (Wildlife) & Chief Wildlife Warden, Jharkhand for its implementation. The duly approved plan should be submitted in RO, MoEF&CC, Ranchi before issuance of Final approval.**
- (16) **User agency shall deposit the implementation cost of aforesaid IWMP to state forest department before the issuance of final approval.**
- (17) **Around 125Ha of forest land likely to be constricted and left fragmented due to this proposed project shall be appropriately planted and managed with dedicated watch & ward by state forest department at the project cost.**
- (18) User Agency shall obtain Environmental Clearance as per the provisions of the Environmental (Protection) Act, 1986, if applicable.
- (19) The layout plan of the proposal shall not be changed without prior approval of Central Government.
- (20) No labour camp shall be established on the forest land.
- (21) Sufficient firewood, preferably the alternate fuel, shall be provided by the User Agency to the labourer after purchasing the same from the State Forest Department or the Forest Development Corporation or any other legal source of alternate fuel.
- (22) The boundary of the diverted forest land shall be suitably demarcated on ground at the project cost, as per the directions of the concerned Divisional Forest Officer.
- (23) No additional or new path will be constructed inside the forest area for transportation of construction materials for execution of the project work.
- (24) The period of diversion under this approval shall be co-terminus with the period of lease to be granted in favour of the user agency or the project life, whichever is less.
- (25) The forest land shall not be used for any purpose other than that specified in the project proposal.

The forest land proposed to be diverted shall under no circumstances be transferred to any other agencies, department or person without prior approval of Govt. of India.



(27) **The User Agency should formulate & implement Soil Moisture Conservation plan around the area proposed for diversion which shall include top-soil management plan also under the supervision of concerned DFO.**

- (28) **The KML files of the forest area to be diverted and the CA area shall be uploaded on the e-Green watch portal with all requisite details and submitting compliance report for seeking Stage-II approval.**
- (29) Violation of any of these conditions will amount to violation of Forest (Conservation) Act, 1980 and action would be taken as per the MoEF&CC Guideline F. No. 11-42/2017-FC dt 29/01/2018.
- (30) Any other condition that the Ministry of Environment, Forests & Climate Change may stipulate from time to time in the interest of conservation, protection and development of forests & wildlife.
- (31) The compliance report shall be uploaded on e-portal (<https://parivesh.nic.in/>).

2. After receipt of the compliance report regarding fulfillment of the conditions as stipulated above, from the State Government, formal approval will be issued in this regard under Section 2 of Forest (Conservation) Act, 1980. Transfer of forest land to user agency should not be given effect to by the State Government till formal order approving diversion of forest land is issued by the Central Government. To facilitate speedy execution of this project involving diversion for the project, the in-principle approval may be deemed as the permission for commencement of works, if the required funds for CA, NPV and other compensatory levies as we as non-forest land specified in the in-principle approval are realized from the user agency and accordingly the State Government, by passing an order, may allow the commencement of work of the linear project in forest land for a period of one year (The detail guideline issued vide Ministry letter No. 11-306/2014-FC, dated 28.08.2015 may be referred).

विश्वासभाजन

Signed by Shashi Shankar

Pathak

Date: 18-01-2024 17:26:22

(शशि शंकर)

Reason: Approved
सहायक वन महानिरीक्षक

प्रतिलिपि:-

- आई०जी०एफ०, आर०ओ०एच०क्यू०, पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, इन्दिरा पर्यावरण भवन, जोर बाग रोड, नई दिल्ली-110003.
- प्रधान मुख्य वन संरक्षक (HoFF)/ प्रधान मुख्य वन संरक्षक- सह - नोडल पदाधिकारी (एफ. सी.), वन, पर्यावरण एवं जलवायु परिवर्तन विभाग, झारखण्ड सरकार, वन भवन, डोरंडा, राँची
- वन प्रमण्डल पदाधिकारी, चतरा साउथ वन प्रमण्डल, चतरा, झारखण्ड ।
- महानिरीक्षक (पर्यावरण एवं वन), सी. सी. एल., दरभंगा हाउस, राँची, झारखण्ड - 834001.



5. परियोजना पदाधिकारी, आम्रपाली, पी. ओ. - सरादु, थाना - टण्डवा, चतरा, झारखण्ड - 825321.
6. गार्ड फाईल।

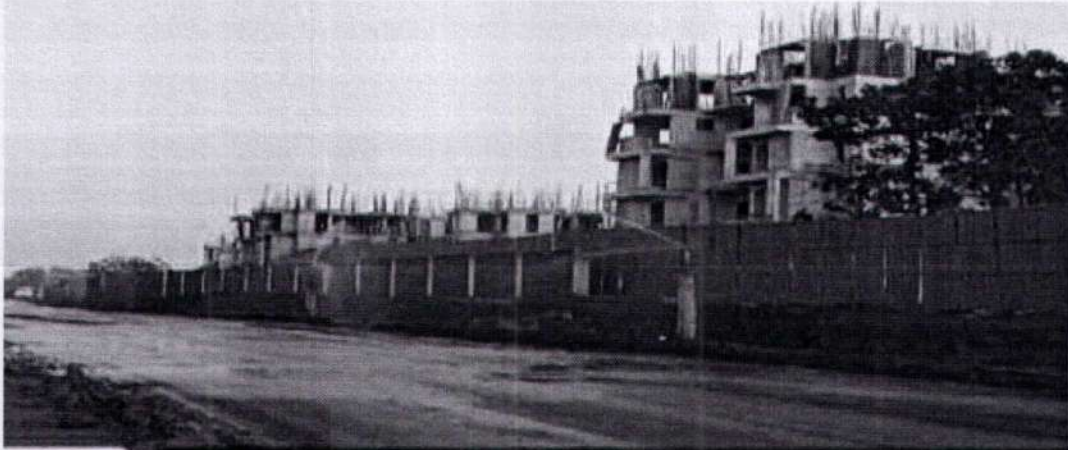
सहायक वन महानिरीक्षक



Annexure:- 2



Annexure-2 Photographs of Wind Breaking Screen

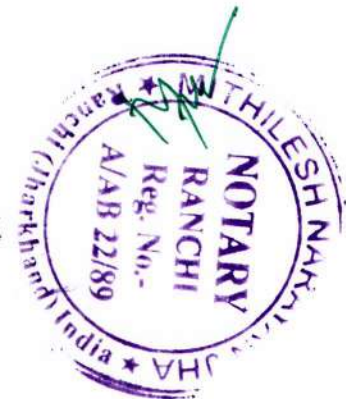


Honhi, Jharkhand, India
Unnamed Road, Honhi,
Jharkhand 825321, India
Lat 23.902807° Long 84.978967°



NOTARY
KANCHI
Reg. No. -
AAB 22/09
HILESH MARATHI
Ranchi, Jharkhand

Annexure:- 3





Bid Number/बोली क्रमांक (बिड संख्या):
GEM/2023/B/4346273
Dated/दिनांक : 16-12-2023

Bid Document/ बिड दस्तावेज़

Bid Details/बिड विवरण	
Bid End Date/Time/बिड बंद होने की तारीख/समय	11-01-2024 11:00:00
Bid Opening Date/Time/बिड खुलने की तारीख/समय	11-01-2024 11:30:00
Bid Offer Validity (From End Date)/बिड पेशकश वैधता (बंद होने की तारीख से)	120 (Days)
Ministry/State Name/मंत्रालय/राज्य का नाम	Ministry Of Coal
Department Name/विभाग का नाम	Materials Management
Organisation Name/संगठन का नाम	Central Coalfields Limited
Office Name/कार्यालय का नाम	Central Coalfields Limited
Item Category/मद केटेगरी	Hiring of Earth Moving Equipments, Material Handling Equipments and Cranes (per Hour basis) - mechanical road sweeper; Mechanical Sweeping and Vacuum Cleaner Trucks; up-to 5 years
Contract Period/अनुबंध अवधि	3 Year(s)
Years of Past Experience Required for same/similar service/उन्हीं/समान सेवाओं के लिए अपेक्षित विगत अनुभव के वर्ष	7 Year (s)
Past Experience of Similar Services required/इसी तरह की सेवाओं का पिछला आवश्यक अनुभव है	Yes
MSE Exemption for Years of Experience and Turnover/ अनुभव के वर्षों से एमएसई छूट	No
Startup Exemption for Years of Experience and Turnover/ अनुभव के वर्षों से स्टार्टअप छूट	No
Document required from seller/विक्रेता से मांगे गए दस्तावेज़	Experience Criteria,Certificate (Requested in ATC),Additional Doc 1 (Requested in ATC),Additional Doc 2 (Requested in ATC) *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer
Bid to RA enabled/बिड से रिवर्स नीलामी सक्रिय किया	No
ITC available to buyer/क्रेता के लिए उपलब्ध आईटीसी	Yes



Bid Details/बिड विवरण	
Type of Bid/बिड का प्रकार	Two Packet Bid
Time allowed for Technical Clarifications during technical evaluation/तकनीकी मूल्यांकन के दौरान तकनीकी स्पष्टीकरण हेतु अनुमत समय	7 Days
Estimated Bid Value/अनुमानित बिड मूल्य	29230855
Payment Timelines	Payments shall be made to the Seller within 21 days of issue of consignee receipt-cum-acceptance certificate (CRAC) and on-line submission of bills (This is in supersession of 10 days time as provided in clause 12 of GeM GTC)
Evaluation Method/मूल्यांकन पद्धति	Total value wise evaluation
Financial Document Indicating Price Breakup Required/मूल्य दर्शाने वाला वित्तीय दस्तावेज ब्रेकअप आवश्यक है	Yes

EMD Detail/ईएमडी विवरण

Advisory Bank/एडवाइजरी बैंक	State Bank of India
EMD Amount/ईएमडी राशि	121800

ePBG Detail/ईपीबीजी विवरण

Advisory Bank/एडवाइजरी बैंक	State Bank of India
ePBG Percentage(%) / ईपीबीजी प्रतिशत (%)	5.00
Duration of ePBG required (Months) / ईपीबीजी की अपेक्षित अवधि (महीने).	40

(a). EMD EXEMPTION: The bidder seeking EMD exemption, must submit the valid supporting document for the relevant category as per GeM GTC with the bid. Under MSE category, only manufacturers for goods and Service Providers for Services are eligible for exemption from EMD. Traders are excluded from the purview of this Policy./जेम की शर्तों के अनुसार ईएमडी छूट के इच्छुक बिडर को संबंधित केटेगरी के लिए बिड के साथ वैध समर्थित दस्तावेज प्रस्तुत करने हैं। एमएसई केटेगरी के अंतर्गत केवल वस्तुओं के लिए विनिर्माता तथा सेवाओं के लिए सेवा प्रदाता ईएमडी से छूट के पात्र हैं। व्यापारियों को इस नीति के दायरे से बाहर रखा गया है।

(b). EMD & Performance security should be in favour of Beneficiary, wherever it is applicable./ईएमडी और संपादन जमानत राशि, जहां यह लागू होती है, लाभार्थी के पक्ष में होनी चाहिए।

Beneficiary/लाभार्थी :

GM(E&M)/HOD

Central Coalfields Limited, Materials Management, Central Coalfields Limited, Ministry of Coal

(Manoj Kumar Sharma)

Splitting/विभाजन

Bid splitting not applied./बोली विभाजन लागू नहीं किया गया

MII Compliance/एमआईआई अनुपालन

MII Compliance/एमआईआई अनुपालन	Yes
-------------------------------	-----

1. Years of Past Experience required: The bidder must have experience for number of years as indicated above in bid document (ending month of March prior to the bid opening) of providing similar type of services to any Central / State Govt Organization / PSU / Public Listed Company. Copies of relevant contracts / orders to be uploaded along with bid in support of having provided services during each of the Financial year.

2. Estimated Bid Value indicated above is being declared solely for the purpose of guidance on EMD amount and for determining the Eligibility Criteria related to Turn Over, Past Performance and Project / Past Experience etc. This has no relevance or bearing on the price to be quoted by the bidders and is also not going to have any impact on bid participation. Also this is not going to be used as a criteria in determining reasonableness of quoted prices which would be determined by the buyer based on its own assessment of reasonableness and based on competitive prices received in Bid / RA process.

3. Past Experience of Similar Services: The bidder must have successfully executed/completed similar Services over the last three years i.e. the current financial year and the last three financial years(ending month of March prior to the bid opening): -

1. Three similar completed services costing not less than the amount equal to 40% (forty percent) of the estimated cost; or
2. Two similar completed services costing not less than the amount equal to 50% (fifty percent) of the estimated cost; or
3. One similar completed service costing not less than the amount equal to 80% (eighty percent) of the estimated cost.

Excel Upload Required/एक्सेल में अपलोड किए जाने की आवश्यकता :

Bid Submission Confirmation Sheet - [1702706583.xlsx](#)

Additional Qualification/Data Required/अतिरिक्त योग्यता /आवश्यक डेटा

Please add the detailed specification of the machinery required and detailed scope of work:[1702558896.pdf](#)

Pre Bid Detail(s)

Pre-Bid Date and Time	Pre-Bid Venue
20-12-2023 11:00:00	Office of the GM(E&M), Alakhanada Building, Darbhanga House, CCL, Ranchi, Jharkhand

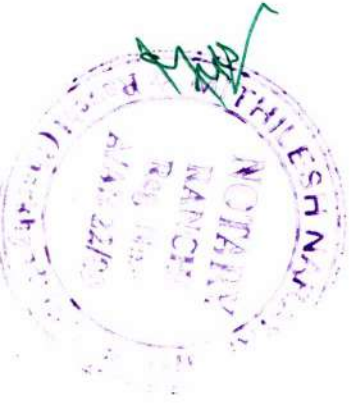
Hiring Of Earth Moving Equipments, Material Handling Equipments And Cranes (per Hour Basis) - Mechanical Road Sweeper; Mechanical Sweeping And Vacuum Cleaner Trucks; Up-to 5 Years (5)

Technical Specifications/तकनीकी विशिष्टियाँ

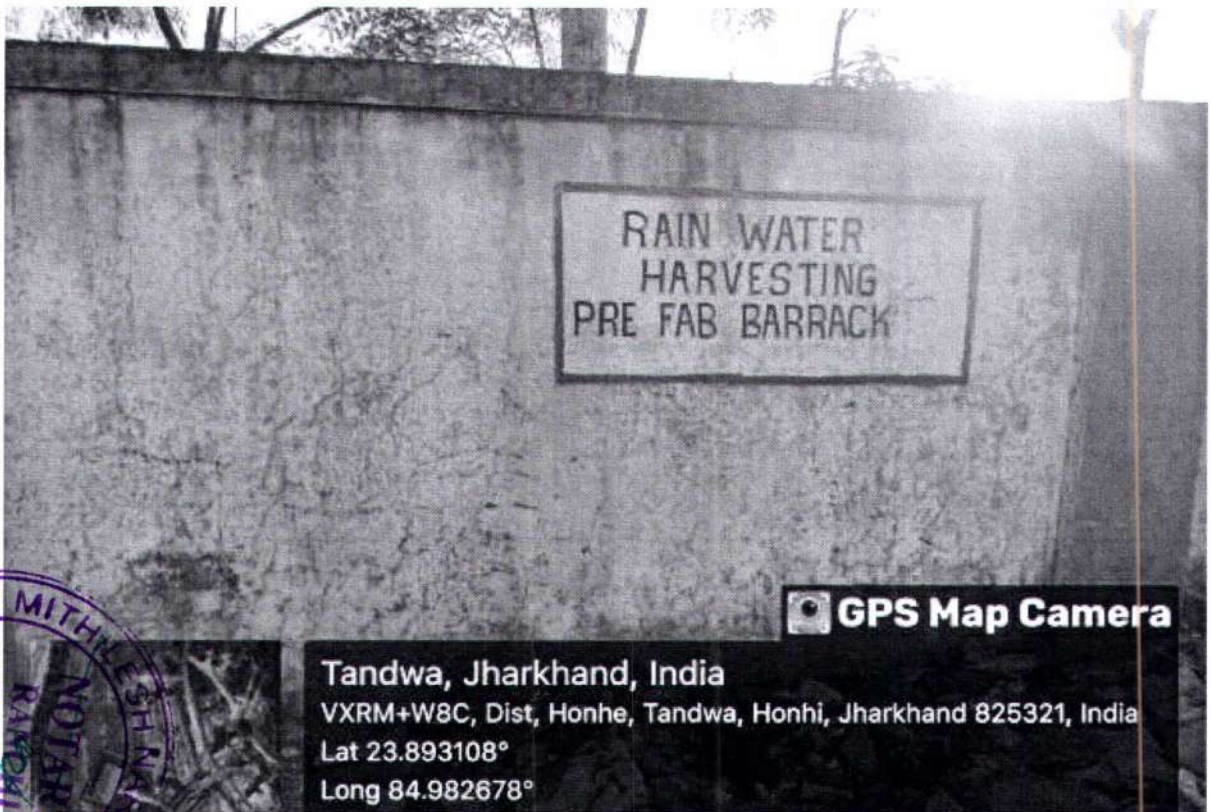
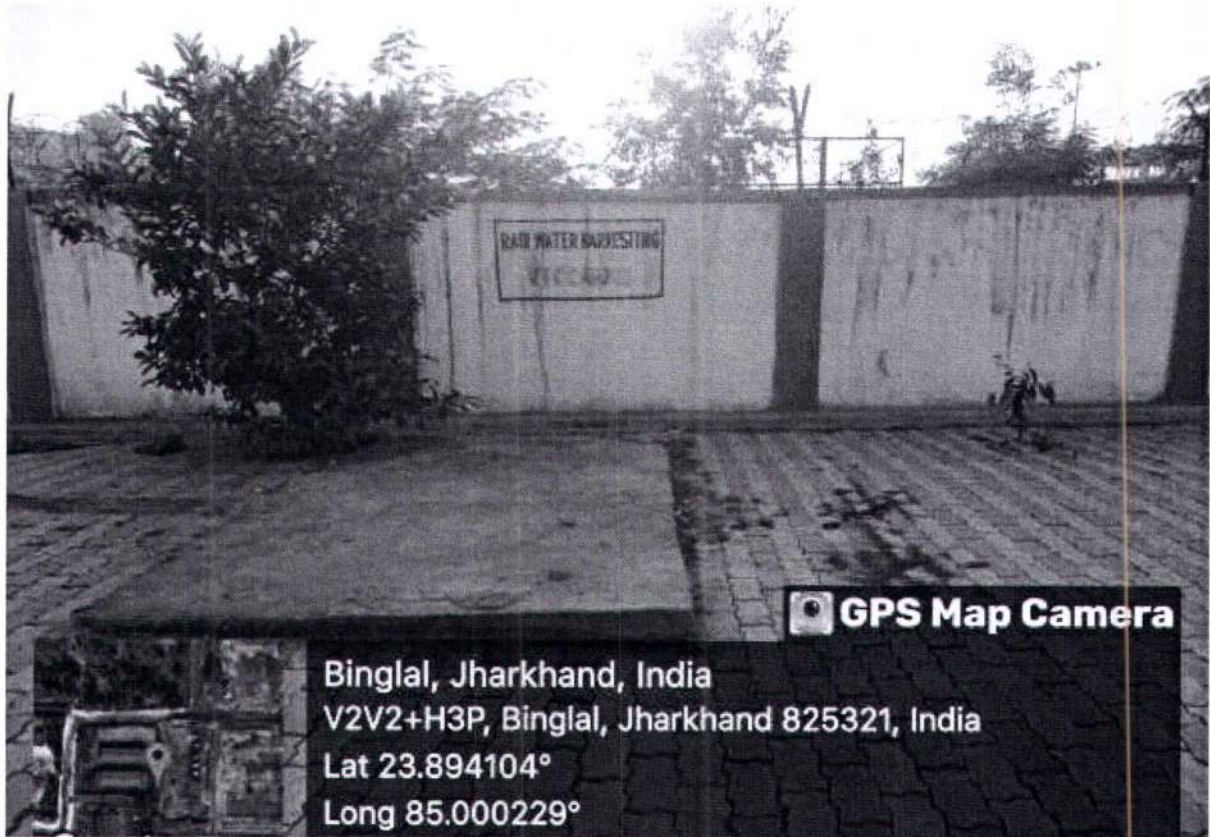
Specification	Values
Core	
Type of Special Purpose Equipment	mechanical road sweeper
Type of Machinery Required	Mechanical Sweeping and Vacuum Cleaner Trucks

~~11~~

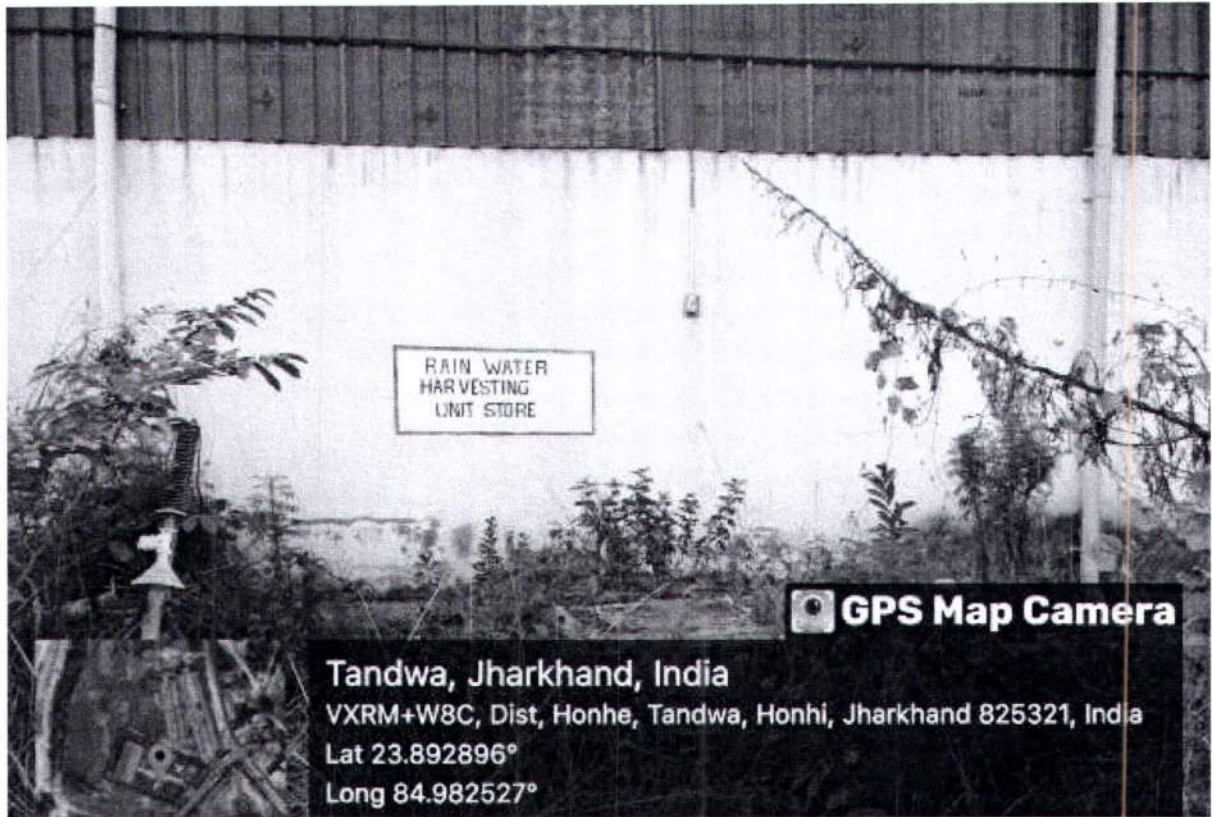
Annexure:- 4



Annexure- 4 Photographs of Rainwater Harvesting



MITHLESH SHANMUKH
NOTARY
RANCHI
Reg. No. A/AB 22/89
Jharkhand



NOTARY
RANCHI
Reg. No. -
A/NB 22/89

MIPHILESH NARAYAN

Annexure:- 5






Ref: - PO /Amrapali/ Office Order/EC/Compliance/2023-24/1458(A) Date: - 28/09/23

Office Order

As per the directives from CCL HQ and A-C Area, an Environment Management Cell is officially established for the Amrapali Project in the Amrapali-Chandragupt Area. The structure of the Environment Management Cell is outlined as follows:

1. Colliery Surveyor, Amrapali Project
2. Colliery Manager, Amrapali Project
3. Project Engineer (Civil), Amrapali Project
4. Project Engineer (E&M), Amrapali Project
5. Project Engineer (X), Amrapali Project
6. Siding Manager, Shivpur Siding
7. Dispatch Officer, Amrapali Project
8. Project Officer, Amrapali Project
9. Nodal Officer (Environment & Forest), Amrapali-Chandragupt Area
10. Assistant Manager (Environment), Amrapali-Chandragupt Area
11. Staff Officer (Project & Planning), Amrapali-Chandragupt Area
12. General Manager, Amrapali-Chandragupt Area
13. HOD (Environment and Forest), CCL HQ

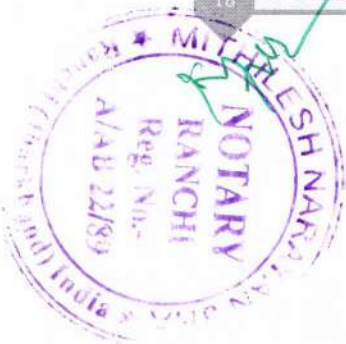
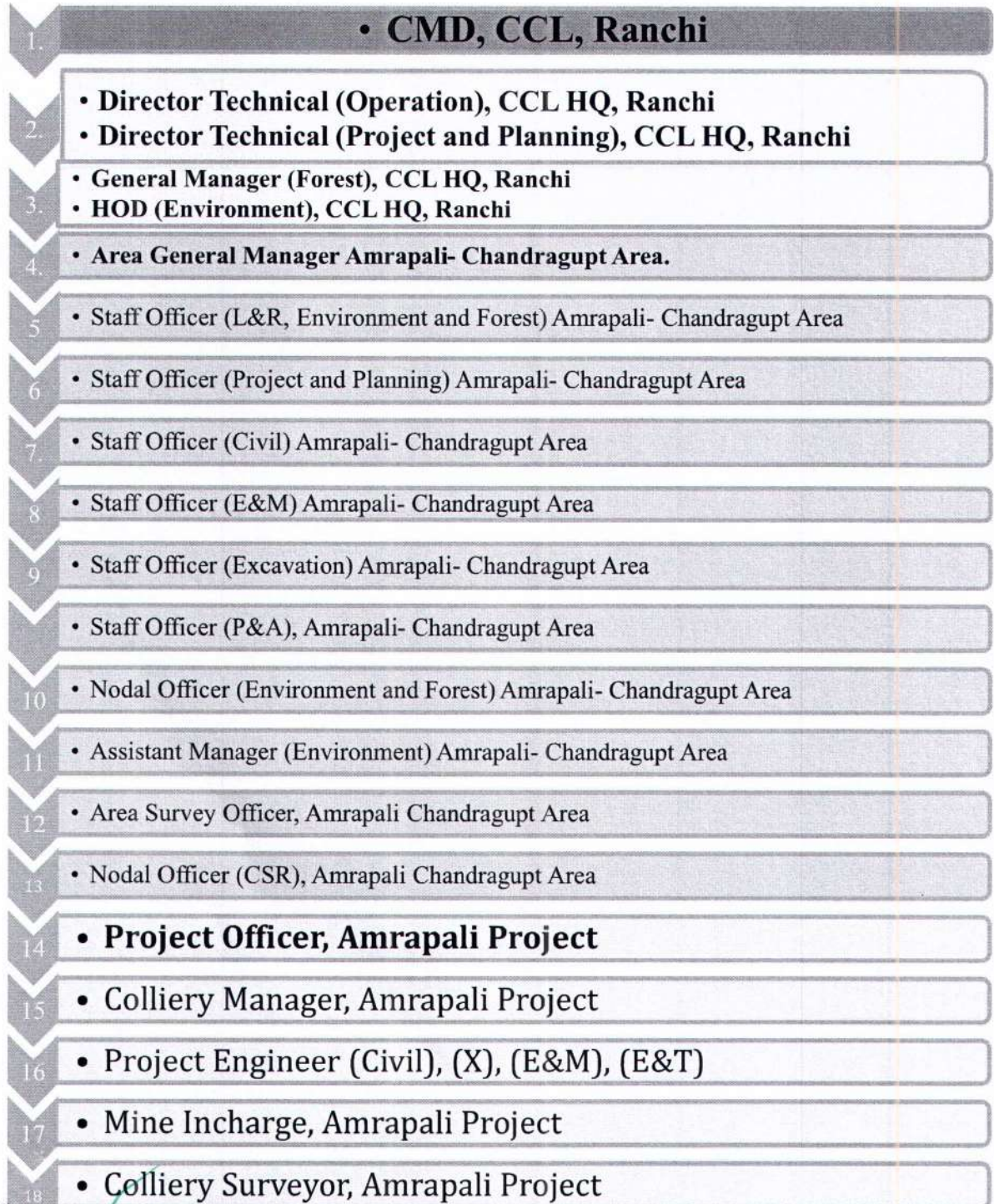

 (Project Officer)
 Amrapali OCP, CCL

Copy to: -

1. General Manager, Amrapali-Chandragupt Area
2. HOD (Env. & Forest), CCL HQ - Ranchi.
3. Office copy



Responsibility Matrix to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions in Amrapali Project, Amrapali-Chandragupt Area, CCL are as mentioned in flow chart below: -





TEST REPORT

06/24 Test Report No. 1000	Job No. 094323120	Year	FY2024-25
Type of Sample	Ambient Air	Quarter Ending	Jun-24
Customer	CCL		
Mode of Receipt of Sample:	Joint sampling with customer		
Testing/ Sampling Protocol	IS 5182 (part 14): 2000 ,R -2010, Methods for Measurement of Air Pollution, LQR 32		
Remarks & Observation:	All samplers placed 1.5 m above ground level		

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali Project: Amrapali Stations: Site Office

Month	Date of Sampling	Date of receipt of sample	Date of analysis	Parameters (in $\mu\text{g}/\text{m}^3$)					Wind Direction (from) & Weather
				Total Particulate Matter ($\text{PM}_{10} + >\text{PM}_{10}$)TPM	Particulate Matter (PM_{10})	Particulate Matter ($\text{PM}_{2.5}$)	Sulphur Dioxide (SO_2)	Nitrogen Oxides (as NO_x)	
Apr-24 1st FN	08/04/24-09/04/24	15-04-2024	15/04/24-18/04/24	212	84	38	< 25	< 6	West Sunny
Apr-24 2nd FN	24/04/24-25/04/24	02-05-2024	02/05/24-04/05/24	223	102	42	< 25	< 6	East Sunny
May-24 3rd FN	10/05/24-11/05/24	16-05-2024	16/05/24-18/04/24	218	76	31	< 25	< 6	North Sunny
May-24 4th FN	27/05/24-28/05/24	04-06-2024	04/06/24-06/06/24	211	85	36	< 25	< 6	West Sunny
Jun-24 5th FN	13/06/24-14/06/24	17-06-2024	17/06/24-19/06/24	207	84	36	< 25	< 6	West Sunny
Jun-24 6th FN	25/06/24-26/06/24	01-07-2024	01/07/24-03/07/24	193	79	32	< 25	< 6	East Sunny

Note:

1. Gazette Notification No. G.S.R 742(E) dt.25th Sept.'2000 is applicable in core zone.
2. Gazette Notification No. G.S.R 826 (E) dt.Nov.'2009 is applicable in buffer zone.

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TEST REPORT

06/24 Test Report No. 1001	Job No. 094323120	Year	FY2024-25
Type of Sample	Ambient Air	Quarter Ending	Jun-24
Customer	CCL		
Mode of Receipt of Sample:	Joint sampling with customer		
Testing/ Sampling Protocol	IS 5182 (part 14): 2000 ,R -2010, Methods for Measurement of Air Pollution, LQR 32		
Remarks & Observation:	All samplers placed 1.5 m above ground level		

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali Project: Amrapali Stations: Weight Bridge

Month	Date of Sampling	Date of receipt of sample	Date of analysis	Parameters (in $\mu\text{g}/\text{m}^3$)					Wind Direction (from) & Weather
				Total Particulate Matter ($\text{PM}_{10} + >\text{PM}_{10}$)TPM	Particulate Matter (PM_{10})	Particulate Matter ($\text{PM}_{2.5}$)	Sulphur Dioxide (SO_2)	Nitrogen Oxides (as NO_x)	
Apr-24 1st FN	09/04/24-10/04/24	15-04-2024	15/04/24-18/04/24	177	92	48	< 25	< 6	West Sunny
Apr-24 2nd FN	25/04/24-26/04/24	02-05-2024	02/05/24-04/05/24	165	77	48	< 25	< 6	East Sunny
May-24 3rd FN	11/05/24-12/05/24	16-05-2024	16/05/24-18/04/24	178	74	38	< 25	< 6	West Sunny
May-24 4th FN	28/05/24-29/05/24	04-06-2024	04/06/24-06/06/24	201	84	41	< 25	< 6	West Sunny
Jun-24 5th FN	13/06/24-14/06/24	17-06-2024	17/06/24-19/06/24	202	77	44	< 25	< 6	West Sunny
Jun-24 6th FN	26/06/24-27/06/24	01-07-2024	01/07/24-03/07/24	187	75	45	< 25	< 6	East Sunny

Note:

1. Gazette Notification No. G.S.R 742(E) dt.25th Sept.'2000 is applicable in core zone.
2. Gazette Notification No. G.S.R 826 (E) dt.Nov.'2009 is applicable in buffer zone.

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TEST REPORT

06/24 Test Report No. 1002	Job No. 094323120	Year	FY2024-25
Type of Sample	Ambient Air	Quarter Ending	Jun-24
Customer	CCL		
Mode of Receipt of Sample:	Joint sampling with customer		
Testing/ Sampling Protocol	IS 5182 (part 14): 2000 ,R -2010, Methods for Measurement of Air Pollution, LQR 32		
Remarks & Observation:	All samplers placed 1.5 m above ground level		

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali Project: Amrapali Stations: Binglath Check Post

Month	Date of Sampling	Date of receipt of sample	Date of analysis	Parameters (in $\mu\text{g}/\text{m}^3$)					Wind Direction (from) & Weather
				Total Particulate Matter (PM ₁₀ + >PM ₁₀)TPM	Particulate Matter (PM ₁₀)	Particulate Matter (PM _{2.5})	Sulphur Dioxide (SO ₂)	Nitrogen Oxides (as NO _x)	
Apr-24 1st FN	09/04/24-10/04/24	15-04-2024	15/04/24-18/04/24	195	106	40	< 25	< 6	West Sunny
Apr-24 2nd FN	25/04/24-26/04/24	02-05-2024	02/05/24-04/05/24	205	89	40	< 25	< 6	East Sunny
May-24 3rd FN	11/05/24-12/05/24	16-05-2024	16/05/24-18/04/24	200	109	50	< 25	< 6	West Sunny
May-24 4th FN	28/05/24-29/05/24	04-06-2024	04/06/24-06/06/24	190	90	41	< 25	< 6	West Sunny
Jun-24 5th FN	13/06/24-14/06/24	17-06-2024	17/06/24-19/06/24	208	96	49	< 25	< 6	West Sunny
Jun-24 6th FN	26/06/24-27/06/24	01-07-2024	01/07/24-03/07/24	203	91	38	< 25	< 6	East Sunny

Note:

1. Gazette Notification No. G.S.R 742(E) dt.25th Sept.'2000 is applicable in core zone.
2. Gazette Notification No. G.S.R 826 (E) dt.Nov.'2009 is applicable in buffer zone.

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TEST REPORT

06/24 Test Report No. 1003	Job No. 094323120	Year	FY2024-25
Type of Sample	Ambient Air	Quarter Ending	Jun-24
Customer	CCL		
Mode of Receipt of Sample:	Joint sampling with customer		
Testing/ Sampling Protocol	IS 5182 (part 14): 2000 ,R -2010, Methods for Measurement of Air Pollution, LQR 32		
Remarks & Observation:	All samplers placed 1.5 m above ground level		

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali **Project:** Amrapali **Stations:** Weight Bridge Near Hone Nala

Month	Date of Sampling	Date of receipt of sample	Date of analysis	Parameters (in $\mu\text{g}/\text{m}^3$)					Wind Direction (from) & Weather
				Total Particulate Matter (PM_{10}^+ > PM_{10})TPM	Particulate Matter (PM_{10})	Particulate Matter ($\text{PM}_{2.5}$)	Sulphur Dioxide (SO_2)	Nitrogen Oxides (as NO_x)	
Apr-24 1st FN	09/04/24-10/04/24	15-04-2024	15/04/24-18/04/24	171	109	53	< 25	< 6	East Sunny
Apr-24 2nd FN	25/04/24-26/04/24	02-05-2024	02/05/24-04/05/24	200	103	73	< 25	< 6	West Sunny
May-24 3rd FN	11/05/24-12/05/24	16-05-2024	16/05/24-18/04/24	205	89	52	< 25	< 6	West Sunny
May-24 4th FN	28/05/24-29/05/24	04-06-2024	04/06/24-06/06/24	217	113	56	< 25	< 6	West Sunny
Jun-24 5th FN	13/06/24-14/06/24	17-06-2024	17/06/24-19/06/24	193	97	47	< 25	< 6	East Sunny
Jun-24 6th FN	26/06/24-27/06/24	01-07-2024	01/07/24-03/07/24	196	115	44	< 25	< 6	East Sunny

Note:

1. Gazette Notification No. G.S.R 742(E) dt.25th Sept.'2000 is applicable in core zone.
2. Gazette Notification No. G.S.R 826 (E) dt.Nov.'2009 is applicable in buffer zone.



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TEST REPORT

06/24 Test Report No. 1004	Job No. 094323120	Year	FY2024-25
Type of Sample	Ambient Air	Quarter Ending	Jun-24
Customer	CCL		
Mode of Receipt of Sample:	Joint sampling with customer		
Testing/ Sampling Protocol	IS 5182 (part 14): 2000 ,R -2010, Methods for Measurement of Air Pollution, LQR 32		
Remarks & Observation:	All samplers placed 1.5 m above ground level		

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali **Project:** Amrapali **Stations:** Honhe Village

Month	Date of Sampling	Date of receipt of sample	Date of analysis	Parameters (in $\mu\text{g}/\text{m}^3$)					Wind Direction (from) & Weather
				*Total Particulate Matter ($\text{PM}_{10} + >\text{PM}_{10}$)/TPM	Particulate Matter (PM_{10})	*Particulate Matter ($\text{PM}_{2.5}$)	Sulphur Dioxide (SO_2)	Nitrogen Oxides (as NO_2)	
Apr-24 1st FN	09/04/24-10/04/24	15-04-2024	15/04/24-18/04/24	144	65	35	< 25	< 6	East Sunny
Apr-24 2nd FN	25/04/24-26/04/24	02-05-2024	02/05/24-04/05/24	146	74	58	< 25	< 6	West Sunny
May-24 3rd FN	11/05/24-12/05/24	16-05-2024	16/05/24-18/04/24	139	67	33	< 25	< 6	West Sunny
May-24 4th FN	28/05/24-29/05/24	04-06-2024	04/06/24-06/06/24	161	78	43	< 25	< 6	West Sunny
Jun-24 5th FN	13/06/24-14/06/24	17-06-2024	17/06/24-19/06/24	190	75	36	< 25	< 6	East Sunny
Jun-24 6th FN	26/06/24-27/06/24	01-07-2024	01/07/24-03/07/24	152	68	32	< 25	< 6	West Sunny

Note:

1. Gazette Notification No. G.S.R 742(E) dt.25th Sept.'2000 is applicable in core zone.
2. Gazette Notification No. G.S.R 826 (E) dt.Nov.'2009 is applicable in buffer zone.

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TEST REPORT

06/24 Test Report No. 1005	Job No. 094323120	Year	FY2024-25
Type of Sample	Ambient Air	Quarter Ending	Jun-24
Customer	CCL		
Mode of Receipt of Sample:	Joint sampling with customer		
Testing/ Sampling Protocol	IS 5182 (part 14): 2000 ,R -2010, Methods for Measurement of Air Pollution, LQR 32		
Remarks & Observation:	All samplers placed 1.5 m above ground level		

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali Project: Amrapali Stations: Ursu Village

Month	Date of Sampling	Date of receipt of sample	Date of analysis	Parameters (in $\mu\text{g}/\text{m}^3$)					Wind Direction (from) & Weather
				*Total Particulate Matter ($\text{PM}_{10} + >\text{PM}_{10}$)TPM	Particulate Matter (PM_{10})	*Particulate Matter ($\text{PM}_{2.5}$)	Sulphur Dioxide (SO_2)	Nitrogen Oxides (as NO_2)	
Apr-24 1st FN	09/04/24-10/04/24	15-04-2024	15/04/24-18/04/24	168	74	34	< 25	< 6	East Sunny
Apr-24 2nd FN	25/04/24-26/04/24	02-05-2024	02/05/24-04/05/24	161	68	48	< 25	< 6	West Sunny
May-24 3rd FN	11/05/24-12/05/24	16-05-2024	16/05/24-18/04/24	171	75	40	< 25	< 6	West Sunny
May-24 4th FN	28/05/24-29/05/24	04-06-2024	04/06/24-06/06/24	178	64	29	< 25	< 6	West Sunny
Jun-24 5th FN	13/06/24-14/06/24	17-06-2024	17/06/24-19/06/24	193	69	34	< 25	< 6	East Sunny
Jun-24 6th FN	26/06/24-27/06/24	01-07-2024	01/07/24-03/07/24	188	66	37	< 25	< 6	West Sunny

Note:

1. Gazette Notification No. G.S.R 742(E) dt.25th Sept.'2000 is applicable in core zone.
2. Gazette Notification No. G.S.R 826 (E) dt.Nov.'2009 is applicable in buffer zone.

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TEST REPORT

06/24 Test Report No. 1006	Job No. 094323120	Year	FY2024-25
Type of Sample	Ambient Air	Quarter Ending	Jun-24
Customer	CCL		
Mode of Receipt of Sample:	Joint sampling with customer		
Testing/ Sampling Protocol	IS 5182 (part 14): 2000 ,R -2010, Methods for Measurement of Air Pollution. LQR 32		
Remarks & Observation:	All samplers placed 1.5 m above ground level		

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali Project: Amrapali Stations: Kumarang Kalan Village

Month	Date of Sampling	Date of receipt of sample	Date of analysis	Parameters (in $\mu\text{g}/\text{m}^3$)					Wind Direction (from) & Weather
				*Total Particulate Matter ($\text{PM}_{10} + >\text{PM}_{10}$)/TPM	Particulate Matter (PM_{10})	*Particulate Matter ($\text{PM}_{2.5}$)	Sulphur Dioxide (SO_2)	Nitrogen Oxides (as NO_2)	
Apr-24 1st FN	10/04/24-11/04/24	15-04-2024	15/04/24-18/04/24	124	58	28	< 25	< 6	East Sunny
Apr-24 2nd FN	26/04/24-27/04/24	02-05-2024	02/05/24-04/05/24	129	54	23	< 25	< 6	East Sunny
May-24 3rd FN	11/05/24-12/05/24	16-05-2024	16/05/24-18/04/24	126	60	26	< 25	< 6	North Sunny
May-24 4th FN	29/05/24-30/05/24	04-06-2024	04/06/24-06/06/24	140	72	33	< 25	< 6	South Sunny
Jun-24 5th FN	14/06/24-15/06/24	17-06-2024	17/06/24-19/06/24	164	71	30	< 25	< 6	West Sunny
Jun-24 6th FN	27/06/24-28/06/24	01-07-2024	01/07/24-03/07/24	159	65	27	< 25	< 6	East Sunny

Note:

1. Gazette Notification No. G.S.R 742(E) dt.25th Sept.'2000 is applicable in core zone.
2. Gazette Notification No. G.S.R 826 (E) dt.Nov.'2009 is applicable in buffer zone.

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TEST REPORT

06/24 Test Report No. 1007	Job No. 094323120	Year	FY2024-25
Type of Sample	Ambient Air	Quarter Ending	Jun-24
Customer	CCL		
Mode of Receipt of Sample:	Joint sampling with customer		
Testing/ Sampling Protocol	IS 5182 (part 14): 2000, R -2010, Methods for Measurement of Air Pollution, LQR 32		
Remarks & Observation:	All samplers placed 1.5 m above ground level		

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali **Project:** Amrapali **Stations:** Pachra Village

Month	Date of Sampling	Date of receipt of sample	Date of analysis	Parameters (in $\mu\text{g}/\text{m}^3$)					Wind Direction (from) & Weather
				*Total Particulate Matter ($\text{PM}_{10} + >\text{PM}_{10}$)TPM	Particulate Matter (PM_{10})	*Particulate Matter ($\text{PM}_{2.5}$)	Sulphur Dioxide (SO_2)	Nitrogen Oxides (as NO_2)	
Apr-24 1st FN	10/04/24-11/04/24	15-04-2024	15/04/24-18/04/24	143	61	34	< 25	< 6	West Sunny
Apr-24 2nd FN	26/04/24-27/04/24	02-05-2024	02/05/24-04/05/24	155	73	46	< 25	< 6	East Sunny
May-24 3rd FN	11/05/24-12/05/24	16-05-2024	16/05/24-18/04/24	160	66	33	< 25	< 6	North Sunny
May-24 4th FN	29/05/24-30/05/24	04-06-2024	04/06/24-06/06/24	144	65	27	< 25	< 6	South Sunny
Jun-24 5th FN	14/06/24-15/06/24	17-06-2024	17/06/24-19/06/24	177	75	35	< 25	< 6	West Sunny
Jun-24 6th FN	27/06/24-28/06/24	01-07-2024	01/07/24-03/07/24	192	68	32	< 25	< 6	East Sunny

Note:

1. Gazette Notification No. G.S.R 742(E) dt.25th Sept.'2000 is applicable in core zone.
2. Gazette Notification No. G.S.R 826 (E) dt.Nov.'2009 is applicable in buffer zone.



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TEST REPORT

06/24 Test Report No. 1008	Job No. 094323120	Year	FY2024-25
Type of Sample:	Noise	Quarter Ending	Jun-24
Customer	CCL		
Testing/ Sampling Protocol	'The noise pollution (Regulation and Control), Rules,2000, LQR 34		
Remarks:			

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali **Project:** Amrapali

Station Name	Noise Level dB(A) Leq					
	Apr-24 1st FN	Apr-24 2nd FN	May-24 3rd FN	May-24 4th FN	Jun-24 5th FN	Jun-24 6th FN
	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night
Date of recording	08-04-2024	24-04-2024	10-05-2024	27-05-2024	13-06-2024	25-06-2024
1. Site Office	45.7/40.3	40.5/35.4	54.3/49.6	55.4/50.8	41.3/36.4	48.2/42.1
Date of recording	09-04-2024	25-04-2024	11-05-2024	28-05-2024	13-06-2024	26-06-2024
2. Weight Bridge	46.4/41.5	41.3/36.4	56.7/50.8	57.1/52.3	50.2/46.5	47.3/41.4
Date of recording	09-04-2024	25-04-2024	11-05-2024	28-05-2024	13-06-2024	26-06-2024
3. Binglath Checkpost	49.6/43.2	45.7/40.2	55.4/51.2	56.9/50.4	52.7/48.6	49.7/43.5
Date of recording	09-04-2024	25-04-2024	11-05-2024	28-05-2024	13-06-2024	26-06-2024
4. Weight Bridge near hone nala	48.7/42.4	42.1/37.2	54.8/49.8	56.6/51.8	42.1/37.5	44.6/40.4
Date of recording	09-04-2024	25-04-2024	11-05-2024	28-05-2024	13-06-2024	26-06-2024
5. Honhe Village	47.5/41.3	38.7/32.8	49.9/46.4	51.3/47.5	40.2/36.4	43.3/37.2
Date of recording	09-04-2024	25-04-2024	11-05-2024	28-05-2024	13-06-2024	26-06-2024
6. Ursu Village	46.7/42.8	37.6/31.4	50.1/46.5	50.9/46.4	39.7/34.3	42.5/36.6
Date of recording	10-04-2024	26-04-2024	11-05-2024	29-05-2024	14-06-2024	27-06-2024
7. Kumarang Kalan Village	46.7/42.5	38.2/32.5	50.3/47.1	50.7/47.1	40.5/36.3	41.5/35.6
Date of recording	10-04-2024	26-04-2024	11-05-2024	29-05-2024	14-06-2024	27-06-2024
8. Pachra Village	45.8/40.6	37.3/31.4	48.5/44.6	49.9/46.2	39.6/35.7	40.5/34.8



Analysed By

Ambient Air Quality Standards in respect of Noise as per 'The noise pollution (Regulation and Control), Rules,2000		
Time Frame	Limits in dB(A) Leq	
	Day Time 6.00 AM to 10.00 PM	Night Time 10.00 PM to 6.00 AM
Industrial Area	75	70
Commercial Area	65	55
Residential area	55	45
Silence Zone	50	40

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TEST REPORT

06/24 Test Report No. 1009	Job No. 094323120	Year	FY2024-25
Type of Sample:	Effluent Water	Quarter Ending	Jun-24
Customer	CCL		
Mode of Receipt of Sample:	Joint sampling with customer		
Testing/ Sampling Protocol	MOEF -SCH-VI STANDARDS, Class 'A', LQR 33		
Remarks & Observation:	Samples received in 5 ltr plastic Jerri cane, Colour as observed is transparent		

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali **Project:** Amrapali **Stations:** Mine Water

Analysis Results of FN Effluent Water							
Parameters →				COD	O & G	pH value	TSS
Detection Limit				4	2	0.2	10
MOEF -SCH-VI, STANDARDS, Class 'A'				250	10	5.5 to 9.0	100
Month	Date of Sampling	Date of Receipt of Sample	Date of Analysis	Value in mg/l, except pH			
Apr-24 1st FN	11/04/24	15/04/24	15/04/24-30/04/24	16	<2.00	7.9	31
Apr-24 2nd FN	27/04/24	02/05/24	02/05/24-16/05/24	8	<2.00	7.7	29
May-24 3rd FN	12/05/24	16/05/24	16/05/24-03/06/24	20	<2.00	7.5	33
May-24 4th FN	30/05/24	04/06/24	04/06/24-14/06/24	12	<2.00	7.3	40
Jun-24 5th FN	14/06/24	17/06/24	17/06/24-01/07/24	16	<2.00	7.8	36
Jun-24 6th FN	28/06/24	01/07/24	01/07/24-15/07/24	8	<2.00	6.7	38
BIS Standard & Method				APHA, 23rd Edition, Closed Reflux, Titrimetric Method, 2017	IS 3025/39:1991, R : 2003, Partition Gravimetric	IS-3025/11:1983, R-1996, Electrometric	IS 3025/17:1984, R :1996, Gravimetric Method



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TEST REPORT

06/24 Test Report No. 1010	Job No. 094323120	Year	FY2024-25
Type of Sample:	Effluent Water	Quarter Ending	Jun-24
Customer	CCL		
Mode of Receipt of Sample:	Joint sampling with customer		
Testing/ Sampling Protocol	MOEF -SCH-VI STANDARDS, Class 'A', LQR 33		
Remarks & Observation:	Samples received in 5 ltr plastic Jerri cane, Colour as observed is transparent		

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali Project: Amrapali Stations: Work Shop

Analysis Results of FN Effluent Water							
Parameters →				COD	O & G	pH value	TSS
Detection Limit				4	2	0.2	10
MOEF -SCH-VI, STANDARDS, Class 'A'				250	10	5.5 to 9.0	100
Month	Date of Sampling	Date of Receipt of Sample	Date of Analysis	Value in mg/l, except pH			
Apr-24 1st FN	11/04/24	15/04/24	15/04/24-30/04/24	84	3.2	7.5	181
Apr-24 2nd FN	27/04/24	02/05/24	02/05/24-16/05/24	80	2.6	8	176
May-24 3rd FN	12/05/24	16/05/24	16/05/24-03/06/24	76	202	7.9	192
May-24 4th FN	30/05/24	04/06/24	04/06/24-14/06/24	96	3	8	185
Jun-24 5th FN	14/06/24	17/06/24	17/06/24-01/07/24	68	2.8	7.3	164
Jun-24 6th FN	28/06/24	01/07/24	01/07/24-15/07/24	84	2.4	7.1	173
BIS Standard & Method				APHA, 23rd Edition, Closed Reflux, Titrimetric Method, 2017	IS 3025/39:1991, R : 2003, Partition Gravimetric	IS-3025/11:1983, R-1996, Electrometric	IS 3025/17:1984, R :1996, Gravimetric Method



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TEST REPORT

06/24 Test Report No. 1011	Job No. 094323120	Year	FY2024-25
Type of Sample:	Surface Water	Quarter Ending	Jun-24
Customer	CCL	Date of Receipt:	15-04-2024
Mode of Receipt of Sample:	Joint sampling with customer	Date of Analysis:	15.04.24-04.06.24
Testing/ Sampling Protocol	LQR 33		
Remarks & Observation:	Samples received in 5 ltr plastic Jerri cane, Colour as observed is transparent		

TEST RESULT

The sample has been tested with the following results: -

Area :	Amrapali	Project:	Amrapali
Stations:	1. Hone Nala U/S 2. Hone Nala D/S 3. Barki River	Date of Sampling:	11-04-2024 11-04-2024 11-04-2024

Sl.No	Parameter	Sampling Stations				Detection Limit	BIS Standard & Method
		1	2	3	4		
1	Arsenic (as As), mg/l	<0.002	<0.002	<0.002		0.002	IS 3025/37:1988 R : 2003, AAS-VGA, Method
2	BOD (3 days 27°C), mg/l	<2.0	<2.0	<2.0		2.00	IS 3025 /44: 1993, R: 2003 3 day incubation at 27°C
3	Cadmium(as Cd), mg/l	<0.0004	<0.0004	<0.0004		0.0004	APHA, 23rd Edition AAS-GTA Method, 2017
4	Chlorides (as Cl ⁻), mg/l	20	14	20		2.00	IS-3025/32:1988, R-2007, Argentometric Method
5	Copper (as Cu), mg/l	<0.02	<0.02	<0.02		0.02	IS 3025/42: 1992, R : 2009, AAS (Air-Ac-Flame)
6	Disolved Oxygen	6.9	6.8	6.5		0.10	IS 3025/38: 1989, R:2003, Winkler Azide Method
7	Fluoride (as F ⁻) mg/l	0.9	0.77	0.95		0.02	APHA, 23rd Edition, SPADNS Method, 2017
8	Hexavalent Chromium, mg/l	<0.01	<0.01	<0.01		0.01	APHA, 23rd Edition, Diphenylcarbohydrazide, 2017
9	Iron (as Fe), mg/l	<0.04	<0.04	<0.04		0.04	IS 3025 /53: 2003, R : 2009, AAS (Air-Ac-Flame)
10	Lead (as Pb), mg/l	<0.001	<0.001	<0.001		0.001	APHA, 23rd Edition AAS-GTA Method, 2017
11	Nitrate (as NO ₃ ⁻), mg/l	3.11	0.99	2.47		0.50	APHA, 23rd Edition, UV - Spectrophotometric, 2017
12	pH value	8.1	8	8		1.0	IS-3025/11:1983, R-1996, Electrometric Method
13	Phenolic compounds (as C ₆ H ₅ OH), mg/l	<0.001	<0.001	<0.001		0.001	APHA, 23rd Edition, 4- Amino Antipyrine Method, 2017
14	Selenium (as Se), mg/l	<0.0005	<0.0005	<0.0005		0.0005	IS 3025/56:2003 AAS-VGA Method
15	Sulphate (as SO ₄ ⁻²) mg/l	16	5	393		2.00	APHA, 23rd Edition Turbidity Method, 2017
16	Total Dissolved Solids, mg/l	212	218	525		25.00	IS 3025 /16:1984 R : 2006, Gravimetric Method
17	Total Suspended Solids, mg/l	56	61	55		10.00	IS 3025 /17:1984, R :1996, Gravimetric Method
18	Zinc (as Zn), mg/l	<0.005	<0.005	0.005		0.005	IS 3025 /49: 1994, R : 2009, AAS (Air-Ac-Flame)



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TEST REPORT

06/24 Test Report No. 1012	Job No. 094323120	Year	FY2024-25
Type of Sample:	Surface Water	Quarter Ending	Jun-24
Customer	CCL	Date of Receipt:	15-04-2024
Mode of Receipt of Sample:	Joint sampling with customer	Date of Analysis:	15.04.24-04.06.24
Testing/ Sampling Protocol	LQR 33		
Remarks & Observation:	Samples received in 5 ltr plastic Jerri cane, Colour as observed is transparent		

TEST RESULT

The sample has been tested with the following results: -

Area :	Amrapali	Project:	Amrapali
Stations:		Date of Sampling:	
	4. Dudhmatia Nallah U/S		11-04-2024
	5. Dudhmatia Nallah D/S		11-04-2024

Sl.No	Parameter	Sampling Stations			Detection Limit	BIS Standard & Method
		4	5			
1	Arsenic (as As), mg/l	<0.002	<0.002		0.002	IS 3025/37:1988 R : 2003, AAS-VGA, Method
2	BOD (3 days 27°C), mg/l	<2.0	<2.0		2.00	IS 3025 /44: 1993, R: 2003 3 day incubation at 27°C
3	Cadmium(as Cd), mg/l	<0.0004	<0.0004		0.0004	APHA, 23rd Edition AAS-GTA Method, 2017
4	Chlorides (as Cl ⁻), mg/l	14	14		2.00	IS-3025/32:1988, R-2007, Argentometric Method
5	Copper (as Cu), mg/l	<0.02	<0.02		0.02	IS 3025/42: 1992, R : 2009, AAS (Air-Ac-Flame)
6	Disolved Oxygen	6.6	6		0.10	IS 3025/38: 1989, R:2003, Winkler Azide Method
7	Fluoride (as F ⁻) mg/l	0.74	0.76		0.02	APHA, 23rd Edition, SPADNS Method, 2017
8	Hexavalent Chromium, mg/l	<0.01	<0.01		0.01	APHA, 23rd Edition, Diphenylcarbohydrazide, 2017
9	Iron (as Fe), mg/l	<0.04	<0.04		0.04	IS 3025 /53: 2003, R : 2009, AAS (Air-Ac-Flame)
10	Lead (as Pb), mg/l	<0.001	<0.001		0.001	APHA, 23rd Edition AAS-GTA Method, 2017
11	Nitrate (as NO ₃ ⁻), mg/l	1.05	0.03		0.50	APHA, 23rd Edition, UV - Spectrophotometric, 2017
12	pH value	8.2	8.1		1.0	IS-3025/11:1983, R-1996, Electrometric Method
13	Phenolic compounds (as C ₆ H ₅ OH), mg/l	<0.001	<0.001		0.001	APHA, 23rd Edition, 4- Amino Antipyrine Method, 2017
14	Selenium (as Se), mg/l	<0.0005	<0.0005		0.0005	IS 3025/56:2003 AAS-VGA Method
15	Sulphate (as SO ₄ ⁻²) mg/l	24	5		2.00	APHA, 23rd Edition Turbidity Method, 2017
16	Total Dissolved Solids, mg/l	209	214		25.00	IS 3025 /16:1984 R : 2006, Gravimetric Method
17	Total Suspended Solids, mg/l	18	52		10.00	IS 3025 /17:1984, R :1996, Gravimetric Method
18	Zinc (as Zn), mg/l	<0.005	<0.005		0.005	IS 3025 /49: 1994, R : 2009, AAS (Air-Ac-Flame)



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TEST REPORT

06/24 Test Report No. 1013	Job No. 094323120	Year	FY2024-25
Type of Sample:	Drinking Water	Quarter Ending	Jun-24
Customer	CCL	Date of Receipt:	15-04-2024
Mode of Receipt of Sample:	Joint sampling with customer	Date of Analysis:	15.04.24-04.06.24
Testing/ Sampling Protocol	IS:10500 Drinking Water Standards, LQR 33		
Remarks & Observation:	Samples received in 5 ltr plastic Jerri cane, Colour as observed is transparent		

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali **Project:** Amrapali
Stations: 1. Borewell Water **Date of Sampling:** 11-04-2024
 2. Well Water Ursu 11-04-2024

Sl.No	Parameter	Sampling Stations			Detection Limit	IS:10500 Standards	Standard / Test Method
		1	2	3			
1	Boron (as B), mg/l	<0.20	<0.20		0.20	0.5, Max	APHA, 23rd Edition Carmine Method; 2017
2	Cadmium (as Cd), mg/l	<0.0004	<0.0004		0.0004	0.003, Max	APHA, 23rd Edition AAS-GTA Method, 2017
3	Calcium (as Ca), mg/l	27.2	28.8		1.60	75, Max	IS-3025/40:1991, EDTA
4	Chloride (as Cl ⁻), mg/l	26	26		2.00	250, Max	IS-3025/32:1988, R-2007, Argentometric Method
5	Copper (as Cu), mg/l	<0.02	<0.02		0.02	0.05, Max	IS 3025/42: 1992, R : 2009, AAS (Air-Ac-Flame)
6	Fluoride (as F ⁻) mg/l	0.09	0.05		0.02	1.0, Max	APHA, 23rd Edition, SPADNS Method, 2017
7	Free Residual Chlorine, mg/l	<0.02	<0.02		0.02	0.2, Min	APHA, 23rd Edition, DPD Method, 2017
8	Iron (as Fe), mg/l	<0.04	<0.04		0.04	0.3, Max	IS 3025 /53: 2003, R : 2009, AAS (Air-Ac-Flame)
9	Lead (as Pb), mg/l	<0.001	<0.001		0.001	0.01, Max	APHA, 23rd Edition AAS-GTA Method, 2017
10	Manganese (as Mn), mg/l	0.03	0.03		0.01	0.1, Max	IS-3025/59:2006, AAS (Air-Ac-Flame) Method
11	Nickel (as Ni), mg/l	<0.003	<0.003		0.003	0.02, Max	APHA, 23rd Edition, 3120 B, ICP Method: 2017
12	Nitrate (as NO ₃ ⁻), mg/l	0.50	0.50		0.5	45, Max	APHA, 23rd Edition, UV-Spectrophotometric, 2017
13	Odour	Agreeable	Agreeable		Qualitative	Agreeable	IS 3025 /05:1983, R-2012, Qualitative
14	pH value	6.5	6.5		1.0	6.5 to 8.5	IS-3025/11:1983, R-1996, Electrometric Method
15	Phenolic compounds (as C ₆ H ₅ OH), mg/l	<0.001	<0.001		0.001	0.001, Max	APHA, 23rd Edition, 4-Amino Antipyrine, 2017
16	Selenium (as Se), mg/l	<0.0005	<0.0005		0.0005	0.01, Max	IS 3025/56:2003 AAS-VGA Method
17	Sulphate (as SO ₄ ⁻²) mg/l	80	76		2.00	200, Max	APHA, 23rd Edition, Turbidity Method, 2017
18	Total Alkalinity (CaCO ₃), mg/l	32	36		4.00	200, Max	IS-3025/23:1986, R: 2009, Titration Method
19	Total Arsenic (as As), mg/l	<0.002	<0.002		0.002	0.01, Max	IS 3025/ 37:1988 R : 2003, AAS-VGA: 1998
20	Total Chromium (as Cr), mg/l	<0.002	<0.002		0.002	0.05, Max	APHA, 23rd Edition, 3120 B, ICP Method: 2017
21	Total Dissolved Solids, mg/l	201	198		25.00	500, Max	IS 3025 /16:1984 R : 2006, Gravimetric Method
22	Total Hardness (CaCO ₃), mg/l	92	96		4.00	200, Max	IS-3025/21:1983, R-2009, EDTA Method
23	Turbidity, NTU	1	1		1.0	1.0, Max	IS-3025/10:1984 R-1996, Nephelometric Method
24	Zinc (as Zn), mg/l	0.018	0.03		0.005	5.0, Max	IS 3025 /49: 1994, R : 2009, AAS (Air-Ac-Flame)

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TEST REPORT

06/24 Test Report No. 1014	Job No. 094323120	Year	FY2024-25
Type of Sample	Ambient Air	Quarter Ending	Jun-24
Customer	CCL		
Mode of Receipt of Sample:	Joint sampling with customer		
Testing/ Sampling Protocol	IS 5182 (part 14): 2000 ,R -2010, Methods for Measurement of Air Pollution, LQR 32		
Remarks & Observation:	All samplers placed 1.5 m above ground level		

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali **Project:** Amrapali Siding **Stations:** Sivpur Siding-1

Month	Date of Sampling	Date of receipt of sample	Date of analysis	Parameters (in $\mu\text{g}/\text{m}^3$)					Wind Direction (from) & Weather
				*Total Particulate Matter (PM_{10}^+ > PM_{10})TPM	Particulate Matter (PM_{10})	*Particulate Matter ($\text{PM}_{2.5}$)	Sulphur Dioxide (SO_2)	Nitrogen Oxides (as NO_2)	
Apr-24 1st FN	10/04/24-11/04/24	15-04-2024	15/04/24-18/04/24	220	126	51	< 25	< 6	East Sunny
Apr-24 2nd FN	26/04/24-27/04/24	02-05-2024	15/04/24-18/04/24	208	111	67	< 25	< 6	West Sunny
May-24 3rd FN	11/05/24-12/05/24	16-05-2024	15/04/24-18/04/24	196	86	46	< 25	< 6	North Sunny
May-24 4th FN	29/05/24-30/05/24	04-06-2024	04/06/24-06/06/24	205	102	51	< 25	< 6	South Sunny
Jun-24 5th FN	14/06/24-15/06/24	17-06-2024	17/06/24-19/06/24	213	111	52	< 25	< 6	West Sunny
Jun-24 6th FN	27/06/24-28/06/24	01-07-2024	01/07/24-03/07/24	206	110	47	< 25	< 6	East Sunny

Note:

1. Gazette Notification No. G.S.R 742(E) dt.25th Sept.'2000 is applicable in core zone.
2. Gazette Notification No. G.S.R 826 (E) dt.Nov.'2009 is applicable in buffer zone.



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TEST REPORT

06/24 Test Report No. 1015	Job No. 094323120	Year	FY2024-25
Type of Sample	Ambient Air	Quarter Ending	Jun-24
Customer	CCL		
Mode of Receipt of Sample:	Joint sampling with customer		
Testing/ Sampling Protocol	IS 5182 (part 14): 2000 ,R -2010, Methods for Measurement of Air Pollution, LQR 32		
Remarks & Observation:	All samplers placed 1.5 m above ground level		

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali Project: Amrapali Stations: Sivpur Siding-2
Siding

Month	Date of Sampling	Date of receipt of sample	Date of analysis	Parameters (in $\mu\text{g}/\text{m}^3$)					Wind Direction (from) & Weather
				*Total Particulate Matter ($\text{PM}_{10} + >\text{PM}_{10}$)/TPM	Particulate Matter (PM_{10})	*Particulate Matter ($\text{PM}_{2.5}$)	Sulphur Dioxide (SO_2)	Nitrogen Oxides (as NO_2)	
Apr-24 1st FN	10/04/24-11/04/24	15-04-2024	15/04/24-18/04/24	224	112	42	< 25	< 6	West Sunny
Apr-24 2nd FN	26/04/24-27/04/24	02-05-2024	15/04/24-18/04/24	212	98	60	< 25	< 6	West Sunny
May-24 3rd FN	11/05/24-12/05/24	16-05-2024	15/04/24-18/04/24	218	91	28	< 25	< 6	North Sunny
May-24 4th FN	29/05/24-30/05/24	04-06-2024	04/06/24-06/06/24	206	109	32	< 25	< 6	South Sunny
Jun-24 5th FN	14/06/24-15/06/24	17-06-2024	17/06/24-19/06/24	209	94	35	< 25	< 6	East Sunny
Jun-24 6th FN	27/06/24-28/06/24	01-07-2024	01/07/24-03/07/24	223	100	32	< 25	< 6	West Sunny

Note:

1. Gazette Notification No. G.S.R 742(E) dt.25th Sept.'2000 is applicable in core zone.
2. Gazette Notification No. G.S.R 826 (E) dt.Nov.'2009 is applicable in buffer zone.



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06/24 Test Report No. 1016	Job No. 094323120	Year	FY2024-25
Type of Sample:	Noise	Quarter Ending	Jun-24
Customer	CCL		
Testing/ Sampling Protocol	'The noise pollution (Regulation and Control), Rules, 2000, LQR 34		
Remarks:			

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali **Project:** Amrapali Siding

Station Name	Noise Level dB(A) Leq					
	Apr-24 1st FN	Apr-24 2nd FN	May-24 3rd FN	May-24 4th FN	Jun-24 5th FN	Jun-24 6th FN
	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night
Date of recording	08-04-2024	24-04-2024	10-05-2024	27-05-2024	13-06-2024	25-06-2024
1. Shivpur Siding-1	45.7/40.3	40.5/35.4	54.3/49.6	55.4/50.8	41.3/36.4	48.2/42.1
Date of recording	09-04-2024	25-04-2024	11-05-2024	28-05-2024	13-06-2024	26-06-2024
2. Shivpur Siding-2	46.4/41.5	41.3/36.4	56.7/50.8	57.1/52.3	30.2/46.5	47.3/41.4
Date of recording	09-04-2024	25-04-2024	11-05-2024	28-05-2024	13-06-2024	26-06-2024

Ambient Air Quality Standards in respect of Noise as per 'The noise pollution (Regulation and Control), Rules, 2000		
Time Frame	Limits in dB(A) Leq	
	Day Time 6.00 AM to 10.00 PM	Night Time 10.00 PM to 6.00 AM
Industrial Area	75	70
Commercial Area	65	55
Residential area	55	45
Silence Zone	50	40



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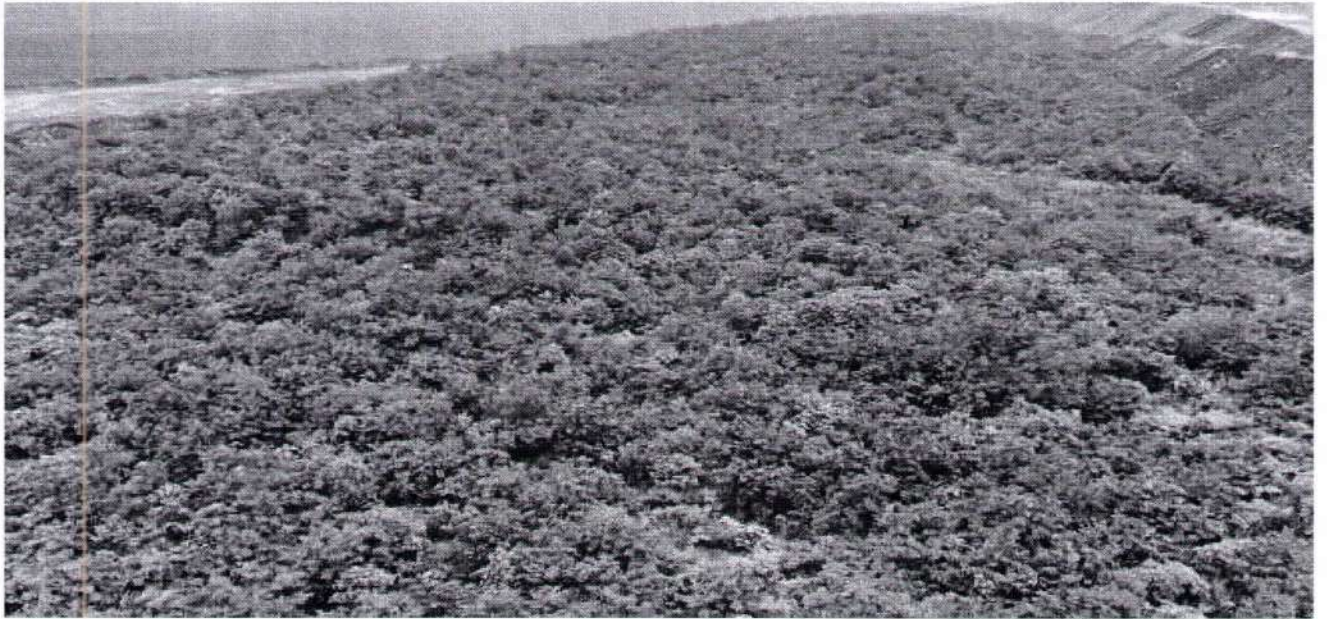
-64-

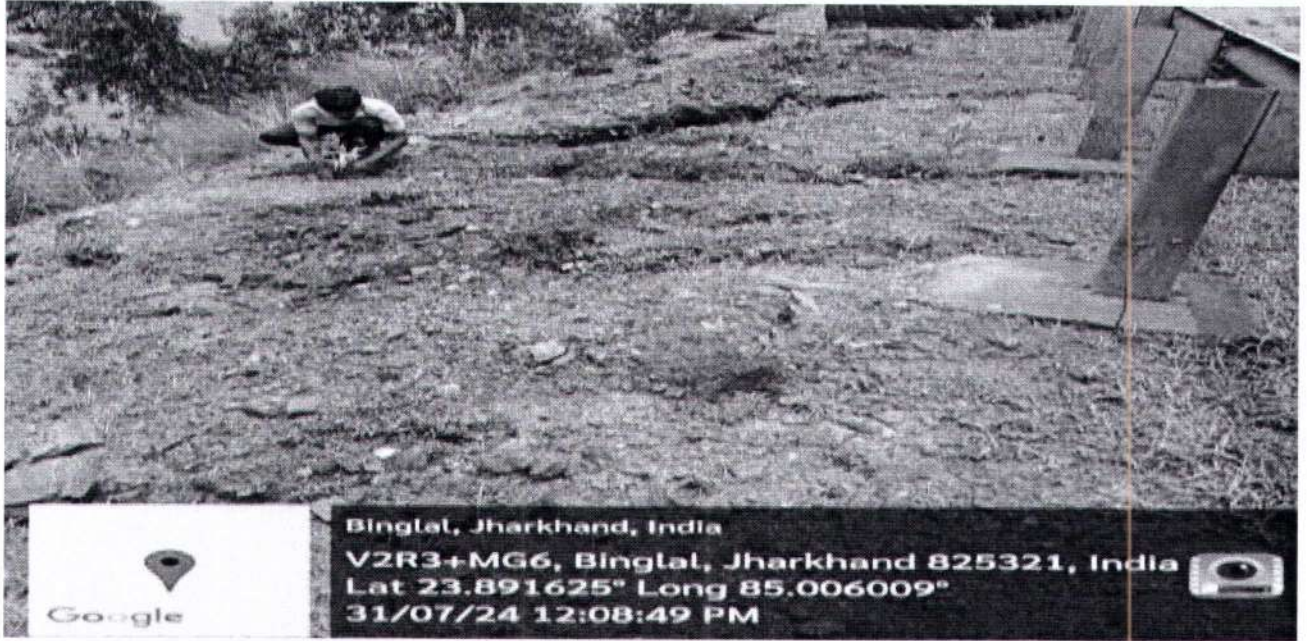
Annexure:- 6



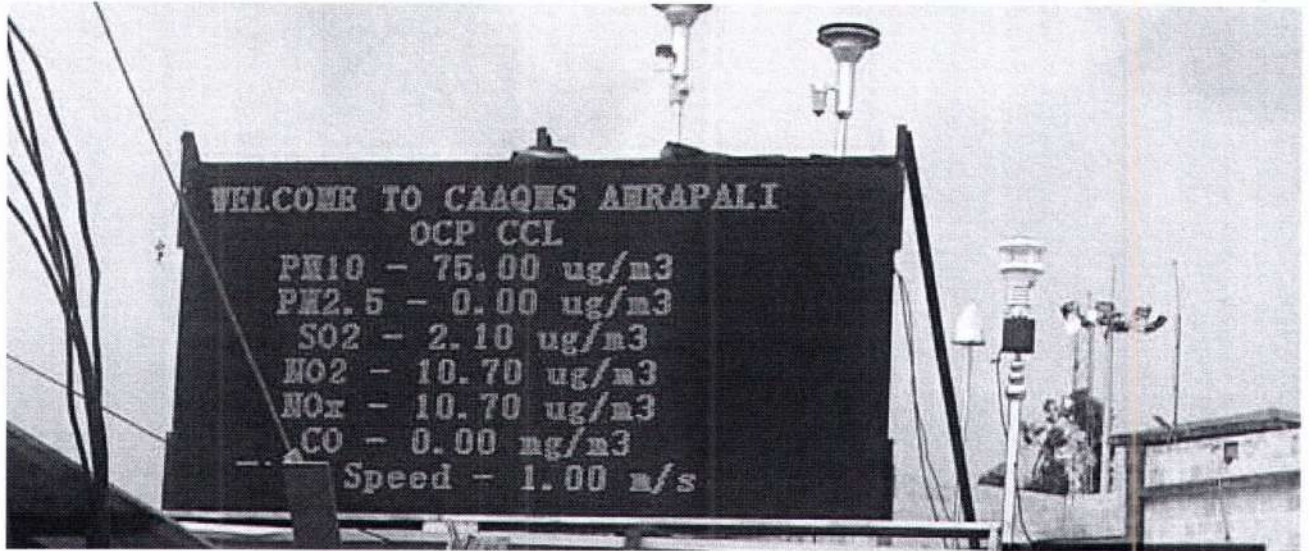
- 6/5 -

Annexure- 6 Photographic evidence of Plantation, Toe wall, CAAQMS





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Annexure:- 7





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

(भूजल निकासी हेतु अनापत्ति प्रमाण पत्र)

NO OBJECTION CERTIFICATE (NOC) FOR GROUND WATER ABSTRACTION

Project Name:	Amrapali Ocp (12.0 Mty) Of M/s Central Coalfields Limited		
Project Address:	Office Of The Project Officer, Amrapali Ocp, Magadh And Amrapali Area		
Village:	Ursu	Block:	Tandwa
District:	Chatra	State:	Jharkhand
Pin Code:			
Communication Address:	Office Of The Project Officer , Amrapali Project, Honhe, Tandwa, Chatra, Jharkhand - 825321		
Address of CGWB Regional Office :	Central Ground Water Board Mid Eastern Region, 6th & 7th Floor, Lok Nayak Jai Prakash Bhawan, Frazer Road Dak Banglow, Patna, Bihar - 800011		

1. NOC No.:	CGWA/NOC/MIN/REN/1/2024/9549	2. Date of Issuance	24/05/2024
3. Application No.:	21-4/328/JH/MIN/2018	4. Category: (GWRE 2023)	Safe
5. Project Status:	Existing With Additional Ground Water Requirment	6. NOC Type:	Renewal
7. Valid from:	05/02/2023	8. Valid up to:	04/02/2025

9. Ground Water Abstraction Permitted:		Fresh Water		Saline Water		Dewatering		Total	
m ³ /day	m ³ /year	m ³ /day	m ³ /year	m ³ /day	m ³ /year	m ³ /day	m ³ /year	m ³ /day	m ³ /year
450.00	164250.00			6305.00	2301325.00				

10. Details of ground water abstraction /Dewatering structures

	Total Existing No.:4						Total Proposed No.:12					
	DW	DCB	BW	TW	MP	MPu	DW	DCB	BW	TW	MP	MPu
Abstraction Structure*	0	0	0	0	0	0	0	0	10	0	0	0
Dewatering Structure*	0	0	0	0	0	4	0	0	0	0	0	2

*DW- Dug Well; DCB-Dug-cum-Bore Well; BW-Bore Well; TW-Tube Well; MP-Mine Pit;MPu-Mine Pumps

11. Ground Water Abstraction/Restoration Charges paid (Rs.):	16207150.00		
12. Environment Compensation (if applicable) paid (Rs.):	0.00		
13. Number of Piezometers(Observation wells) to be constructed/ monitored & Monitoring mechanism.	No. of Piezometers	Monitoring Mechanism	
		Manual	DWLR** DWLR With Telemetry
**DWLR - Digital Water Level Recorder	2	0	1 1

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली - 110011 / 18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Phone: (011) 23383561 Fax: 23382051, 23386743

Website: cgwa-noc.gov.in

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

CENTRAL GROUND WATER AUTHORITY



18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली - 110011 / 18/11, Jamnagar House, Mansingh Road, New Delhi-110011

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Validity of this NOC shall be subject to compliance of the following conditions:

Mandatory conditions:

- 1) Installation of tamper proof digital water flow meter with telemetry on all the abstraction structure(s) shall be mandatory for all users seeking No Objection Certificate and intimation regarding their installation shall be communicated to the CGWA within 30 days of grant of No Objection Certificate.
- 2) Proponents shall mandatorily get water flow meter calibrated from an authorized agency once in a year.
- 3) Construction of purpose-built observation wells (piezometers) for ground water level monitoring shall be mandatory as per Section 14 of Guidelines. Water level data shall be made available to CGWA through web portal. Detailed guidelines for construction of piezometers are given in Annexure-II of the guidelines.
- 4) Proponents shall monitor quality of ground water from the abstraction structure(s) once in a year. Water samples from bore wells/ tube wells / dug wells shall be collected during April/May every year and analysed in NABL accredited laboratories for basic parameters (cations and anions), heavy metals, pesticides/ organic compounds etc. Water quality data shall be made available to CGWA through the web portal.
- 5) In case of mining projects, additional key wells shall be established in consultation with the Regional Director, CGWB for ground water level monitoring four (4) times a year (January, May, August and November) in core as well as buffer zones of the mine.
- 6) In case of mining project the firm shall submit water quality report of mine discharge/ seepage from Govt. approved/ NABL accredited lab.
- 7) The firm shall report compliance of the NOC conditions online in the website (www.cgwa-noc.gov.in) within one year from the date of issue of this NOC.
- 8) Industries abstracting ground water in excess of 100 m³/d shall undertake annual water audit through certified auditors and submit audit reports within three months of completion of the same to CGWA. All such industries shall be required to reduce their ground water use by at least 20% over the next three years through appropriate means.
- 9) Application for renewal can be submitted online from 90 days before the expiry of NOC. Ground water withdrawal, if any, after expiry of NOC shall be illegal & liable for legal action as per provisions of Environment (Protection) Act, 1986.
- 10) This NOC is subject to prevailing Central/State Government rules/laws/norms or Court orders related to construction of tube well/ground water abstraction structure / recharge or conservation structure/discharge of effluents or any such matter as applicable.

General conditions:

- 11) No additional ground water abstraction and/or de-watering structures shall be constructed for this purpose without prior approval of the Central Ground Water Authority (CGWA).
- 12) The proponent shall seek prior permission from CGWA for any increase in quantum of groundwater abstraction (more than that permitted in NOC for specific period).
- 13) Proponents shall install roof top rain water harvesting in the premise as per the existing building bye laws in the premise.
- 14) The project proponent shall take all necessary measures to prevent contamination of ground water in the premises failing which the firm shall be responsible for any consequences arising thereupon.
- 15) In case of industries that are likely to contaminate the ground water, no recharge measures shall be taken up by the firm inside the plant premises. The runoff generated from the rooftop shall be stored and put to beneficial use by the firm.
- 16) Wherever feasible, requirement of water for greenbelt (horticulture) shall be met from recycled / treated waste water.
- 17) Wherever the NOC is for abstraction of saline water and the existing wells (s) is /are yielding fresh water, the same shall be sealed and new tubewell(s) tapping saline water zone shall be constructed within 3 months of the issuance of NOC. The firm shall also ensure safe disposal of saline residue, if any.
- 18) Unexpected variations in inflow of ground water into the mine pit, if any, shall be reported to the concerned Regional Director, Central Ground Water Board.
- 19) In case of violation of any NOC conditions, the applicant shall be liable to pay the penalties as per Section 16 of Guidelines.
- 20) This NOC does not absolve the proponents of their obligation / requirement to obtain other statutory and administrative clearances from appropriate authorities.
- 21) The issue of this NOC does not imply that other statutory / administrative clearances shall be granted to the project by the concerned authorities. Such authorities would consider the project on merits and take decisions independently of the NOC.
- 22) In case of change of ownership, new owner of the industry will have to apply for incorporation of necessary changes in the No Objection Certificate with documentary proof within 60 days of taking over possession of the premises.
- 23) This NOC is being issued without any prejudice to the directions of the Hon'ble NGT/court orders in cases related to ground water or any other related matters.
- 24) Proponents, who have installed/constructed artificial recharge structures in compliance of the NOC granted to them previously and have availed rebate of upto 50% (fifty percent) in the ground water abstraction charges/ground water restoration charges, shall continue to regularly maintain artificial recharge structures.
- 25) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, pharmaceutical, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution as per Annexure III of the guidelines.
- 26) In case of new infrastructure projects having ground water abstraction of more than 20 m³/day, the firm/entity shall ensure implementation of dual water supply system in the projects.
- 27) In case of infrastructure projects, paved/parking area must be covered with interlocking/perforated tiles or other suitable measures to ensure groundwater infiltration/harvesting.
- 28) In case of coal and other base metal mining projects, the project proponent shall use the advance dewatering technology (by construction of series of dewatering abstraction structures) to avoid contamination of surface water.
- 29) The NOC issued is conditional subject to the conditions mentioned in the Public notice dated 27.01.2021 failing which penalty/EC/cancellation of NOC shall be imposed as the case may be.
- 30) This NOC is issued subject to the clearance of Expert Appraisal Committee (EAC) (if applicable).
- 31) In the self-compliance report, the PP shall submit details of Drilling Agency/ Agencies, which has/ have constructed BW(s)/ TW(s) along with undertaking to the effect that all necessary measures have been taken as per directions of Hon'ble Supreme Court provided in Annexure-VII of guidelines dated 24.09.2020 in respect of abandoned/ failed BW(s)/ TW(s)/Piezometer(s), if any. The PP is advised to engage registered drilling agency/ agencies. In the event of any mishap/ unfortunate incident due to negligence in taking measures for prevention of accident due to falling in Bore Well, both PP and concerned drilling agency shall jointly be held responsible and penal action as per extant Government rules shall be taken.

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



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CENTRAL GROUND WATER AUTHORITY

Department of Water Resources, River Development and Ganga Rejuvenation
Ministry of Jal Shakti, Govt. of India

Receipt

(As per the guideline Gazette Notification S.O. 3281(E) regarding the New Guidelines dated 24.09.2020 of CGWA, MoJS, Govt. of India)
<https://cgwa-noc.gov.in>

Application No.:	21-4/328/JH/MIN/2018	Date of Issuance: 24/05/2024
Name of Firm:	AMRAPALI OCP (12.0 MTY) OF M/S CENTRAL COALFIELDS LIMITED	
AppType Category:	Coal	
Application Type:	Mining	
PAN/GSTIN No. of Firm/Individual:	/	

S N	Description	Amount (Rs.)
1.	Application Processing Fee	5000.00
2.	Ground Water Abstraction charges	16207150.00
3.	Ground Water Restoration charges	0
4.	Environmental Compensation Charges (ECRGW) (Date From to) Days-	
5.	Penalty for non-Compliance of NOC conditions Condition to be mentioned	250000.00
6.	Adjustment Charges	
7.	Rebate	
8.	Charges for correction/modification in the existing issued No Objection Certificate	
	S.No. Description Rate	
	(i) Change in User ID Rs. 1000	
	(ii) Change in firm Name Rs. 5000	
	(iii) Extension of No Objection Certificate Rs. 5000	
	(iv) Issuance of duplicate No Objection Certificate Rs. 5000	
	(v) Issuance of corrigendum to No Objection Certificate Rs. 5000	
	(vi) Any other items/correction etc. Rs. 500	
Rs. Rupees One Crore Sixty Four Lakh Sixty Two Thousand One Hundred Fifty Only		16462150.00

This is an system generated invoice, hence, does not require ink signed.

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Term and conditions:

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- i. All disputes are subject to Delhi Jurisdiction.
- ii. Any complaint in regard to the rates will not be entertained.

Member-Secretary
CGWA, New Delhi

CENTRAL GROUND WATER AUTHORITY



Annexure:- 8



-76-



JHARKHAND STATE POLLUTION CONTROL BOARD
T.A. DIVISION BUILDING (GROUND FLOOR), H.E.C., DHURWA, RANCHI -834004
Phone.:2400852, 2400851, Fax:0651- 2400850 www.jspcb.org

FORM 2

[See rule 6(2)]

FORM FOR GRANT OR RENEWAL OF AUTHORIZATION BY STATE POLLUTION CONTROL BOARD TO THE OCCUPIERS, RECYCLERS, REPROCESSORS, REUSERS, USER AND OPERATORS OF DISPOSAL FACILITIES

1. No. of authorization and date of issue: JSPCB/RO/HZB/HWM-7918594/2021/9 20/12/2021
2. Reference of application(No. and date): 7918594 20/06/2020
3. Amrapali OCP Central Coalfields Limited of PRABHU NARAYAN YADAV is hereby granted an authorisation based on the enclosed signed inspection report for generation, collection, reception, storage, transport, reuse, recycling, recovery, pre-processing, co-processing, utilisation, treatment, disposal or any other use of hazardous or other wastes or both on the premises situated at Amrapali OCP HONHE TANDWA CHATRA JHARKHAND 825321

Details of Authorisation

Sl.No.	Category of Hazardous Waste as per the Schedules I, II and III of these rules	Authorised mode of disposal or recycling or utilisation or co-processing, etc.	Quantity(ton/annum)
1	Used/spent oil	MS Drums	32.4 KL/Ann um

(1) The authorisation shall be valid for a period of 5

(2) The authorisation is subject to the following general and specific conditions (Please specify any conditions that need to be imposed over and above general conditions, if any):

A General conditions of authorisation:

1. The authorised person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorisation or its renewal shall be produced for inspection at the request of an officer authorised by the State Pollution Control Board.
3. The person authorised shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorisation.

4. Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorisation.

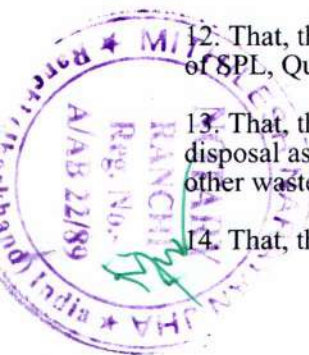
5. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time.



6. The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"
7. It is the duty of the authorised person to take prior permission of the State Pollution Control Board to close down the facility.
8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.
9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilisation of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorisation.
11. The importer or exporter shall bear the cost of import or export and mitigation of damages if any.
12. An application for the renewal of an authorisation shall be made as laid down under these Rules.
13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.
14. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

B Specific conditions:

1. That, the occupier shall comply the provisions of the Environment Protection Act, and Rules.
2. That, the authorization shall be produces at the time of inspection.
3. That, the occupier authorized shall not rent/sell or otherwise transport the H/W without obtaining prior permission of the Board.
4. That, any un-authorization change shall constitute a breach the authorization.
5. That, it is the duty of authorized person to take prior permission of the Board to close down the facility.
6. That, the renewal of authorization shall be made as laid down in the rules.
7. That, any other condition for compliance as per the guidelines issued by the MoEF for CPCB.
8. That, the occupier shall submit annual return for the financial year before 30th June, every year.
9. That, the occupier shall comply all the conditions.
10. That, the occupier shall submit quarterly and annual information on hazardous wastes consumed its source, products generated or resources conserved (Specifying the details like type and quantity of resources conserved) to the concerned SPCB.
11. That, the occupier shall maintain a Pass Book issued by concerned SPCB wherein the following details of each procurement of SPL shall be entered.
 - Address of sender
 - Date of dispatch
 - Quantity procured
 - Seal & signature of the sender
 - Date of receipt on the premises
12. That, the occupier shall have a log book maintained with information on source and date of procurement of SPL, Quantity, date wise utilization of the same, Hazardous Waste generation and its disposal, etc.
13. That, the occupier shall maintain record of Hazardous Waste utilized, Hazardous Waste generated and disposal as per form-3 and shall file annual returns in form-4 as per Rule 20 (1) and (2) of the Hazardous and other waste (Management & Transboundary Movement) Rules, 2016, the concerned SPCB.
14. That, the occupier shall complied all direction given by standard operating and procedure.



A. K.
Yadav

Digitally signed
by A. K. Yadav
Date: 2021.12.20

Memo No:JSPCB/RO/HZB/HWM-7918594/2021/9
Date: 20/12/2021

[Ashok Kumar Yadsav]
Regional Officer

Copy To:

The Member Secretary, Jharkhand State Pollution control Board, Ranchi for information and necessary action.

**A. K.
Yadav** Digitally signed
by A. K. Yadav
Date: 2021.12.20
12:52:58 +05'30'
[Ashok Kumar Yadsav]
Regional Officer



Annexure:- 9



YEAR	AMRAPALI OCP			
	OB	Re-Handling (OB)	COAL	DESPATCH
2013-14 (Feb' 14, Mar'14)	25,42,823	-	0	
2014-15	1,77,37,837	-	25,53,670	16,11,472
2015-16	62,46,281	-	47,93,600	47,51,969
2016-17	41,68,744	-	62,30,775	34,82,624
2017-18	69,64,632	-	64,99,652	68,87,714
2018-19	1,22,32,976	-	1,02,01,423	85,88,001
2019-20	1,37,02,978	-	1,27,91,454	1,34,67,743
2020-21	1,58,81,983	26,95,498	1,43,99,595	1,66,43,419
2021-22	1,58,47,903	-	1,65,89,720	1,75,08,216
2022-23	1,71,73,549	42,60,804	1,80,00,850	1,72,40,804
2023-24	2,13,19,707	71,97,413	2,25,80,617	2,17,47,341



Annexure:- 10



TEST REPORT

06/24 Test Report No. 1000	Job No. 094323120	Year	FY2024-25
Type of Sample	Ambient Air	Quarter Ending	Jun-24
Customer	CCL		
Mode of Receipt of Sample:	Joint sampling with customer		
Testing/ Sampling Protocol	IS 5182 (part 14): 2000 ,R -2010, Methods for Measurement of Air Pollution, LQR 32		
Remarks & Observation:	All samplers placed 1.5 m above ground level		

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali Project: Amrapali Stations: Site Office

Month	Date of Sampling	Date of receipt of sample	Date of analysis	Parameters (in $\mu\text{g}/\text{m}^3$)					Wind Direction (from) & Weather
				Total Particulate Matter (PM_{10}^+ > PM_{10})TPM	Particulate Matter (PM_{10})	Particulate Matter ($\text{PM}_{2.5}$)	Sulphur Dioxide (SO_2)	Nitrogen Oxides (as NO_x)	
Apr-24 1st FN	08/04/24-09/04/24	15-04-2024	15/04/24-18/04/24	212	84	38	< 25	< 6	West Sunny
Apr-24 2nd FN	24/04/24-25/04/24	02-05-2024	02/05/24-04/05/24	223	102	42	< 25	< 6	East Sunny
May-24 3rd FN	10/05/24-11/05/24	16-05-2024	16/05/24-18/04/24	218	76	31	< 25	< 6	North Sunny
May-24 4th FN	27/05/24-28/05/24	04-06-2024	04/06/24-06/06/24	211	85	36	< 25	< 6	West Sunny
Jun-24 5th FN	13/06/24-14/06/24	17-06-2024	17/06/24-19/06/24	207	84	36	< 25	< 6	West Sunny
Jun-24 6th FN	25/06/24-26/06/24	01-07-2024	01/07/24-03/07/24	193	79	32	< 25	< 6	East Sunny

Note:

1. Gazette Notification No. G.S.R 742(E) dt.25th Sept.'2000 is applicable in core zone.
2. Gazette Notification No. G.S.R 826 (E) dt.Nov.'2009 is applicable in buffer zone.

Analysed By

Authorized Signatory

- Note: 1) This Report refers to the values obtained at the time of testing and results related to the items tested
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TEST REPORT

06/24 Test Report No. 1001	Job No. 094323120	Year	FY2024-25
Type of Sample	Ambient Air	Quarter Ending	Jun-24
Customer	CCL		
Mode of Receipt of Sample:	Joint sampling with customer		
Testing/ Sampling Protocol	IS 5182 (part 14): 2000 ,R -2010, Methods for Measurement of Air Pollution, LQR 32		
Remarks & Observation:	All samplers placed 1.5 m above ground level		

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali Project: Amrapali Stations: Weight Bridge

Month	Date of Sampling	Date of receipt of sample	Date of analysis	Parameters (in $\mu\text{g}/\text{m}^3$)					Wind Direction (from) & Weather
				Total Particulate Matter (PM ₁₀ + >PM ₁₀)TPM	Particulate Matter (PM ₁₀)	Particulate Matter (PM _{2.5})	Sulphur Dioxide (SO ₂)	Nitrogen Oxides (as NO _x)	
Apr-24 1st FN	09/04/24-10/04/24	15-04-2024	15/04/24-18/04/24	177	92	48	< 25	< 6	West Sunny
Apr-24 2nd FN	25/04/24-26/04/24	02-05-2024	02/05/24-04/05/24	165	77	48	< 25	< 6	East Sunny
May-24 3rd FN	11/05/24-12/05/24	16-05-2024	16/05/24-18/04/24	178	74	38	< 25	< 6	West Sunny
May-24 4th FN	28/05/24-29/05/24	04-06-2024	04/06/24-06/06/24	201	84	41	< 25	< 6	West Sunny
Jun-24 5th FN	13/06/24-14/06/24	17-06-2024	17/06/24-19/06/24	202	77	44	< 25	< 6	West Sunny
Jun-24 6th FN	26/06/24-27/06/24	01-07-2024	01/07/24-03/07/24	187	75	45	< 25	< 6	East Sunny

Note:

1. Gazette Notification No. G.S.R 742(E) dt.25th Sept.'2000 is applicable in core zone.
2. Gazette Notification No. G.S.R 826 (E) dt.Nov.'2009 is applicable in buffer zone.

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TEST REPORT

06/24 Test Report No. 1002	Job No. 094323120	Year	FY2024-25
Type of Sample	Ambient Air	Quarter Ending	Jun-24
Customer	CCL		
Mode of Receipt of Sample:	Joint sampling with customer		
Testing/ Sampling Protocol	IS 5182 (part 14): 2000 ,R -2010, Methods for Measurement of Air Pollution, LQR 32		
Remarks & Observation:	All samplers placed 1.5 m above ground level		

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali Project: Amrapali Stations: Binglath Check Post

Month	Date of Sampling	Date of receipt of sample	Date of analysis	Parameters (in $\mu\text{g}/\text{m}^3$)					Wind Direction (from) & Weather
				Total Particulate Matter ($\text{PM}_{10} + >\text{PM}_{10}$)TPM	Particulate Matter (PM_{10})	Particulate Matter ($\text{PM}_{2.5}$)	Sulphur Dioxide (SO_2)	Nitrogen Oxides (as NO_x)	
Apr-24 1st FN	09/04/24-10/04/24	15-04-2024	15/04/24-18/04/24	195	106	40	< 25	< 6	West Sunny
Apr-24 2nd FN	25/04/24-26/04/24	02-05-2024	02/05/24-04/05/24	205	89	40	< 25	< 6	East Sunny
May-24 3rd FN	11/05/24-12/05/24	16-05-2024	16/05/24-18/04/24	200	109	50	< 25	< 6	West Sunny
May-24 4th FN	28/05/24-29/05/24	04-06-2024	04/06/24-06/06/24	190	90	41	< 25	< 6	West Sunny
Jun-24 5th FN	13/06/24-14/06/24	17-06-2024	17/06/24-19/06/24	208	96	49	< 25	< 6	West Sunny
Jun-24 6th FN	26/06/24-27/06/24	01-07-2024	01/07/24-03/07/24	203	91	38	< 25	< 6	East Sunny

Note:

1. Gazette Notification No. G.S.R 742(E) dt.25th Sept.'2000 is applicable in core zone.
2. Gazette Notification No. G.S.R 826 (E) dt.Nov.'2009 is applicable in buffer zone.



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TEST REPORT

06/24 Test Report No. 1003	Job No. 094323120	Year	FY2024-25
Type of Sample	Ambient Air	Quarter Ending	Jun-24
Customer	CCL		
Mode of Receipt of Sample:	Joint sampling with customer		
Testing/ Sampling Protocol	IS 5182 (part 14): 2000 ,R -2010, Methods for Measurement of Air Pollution, LQR 32		
Remarks & Observation:	All samplers placed 1.5 m above ground level		

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali **Project:** Amrapali **Stations:** Weight Bridge Near Hone Nala

Month	Date of Sampling	Date of receipt of sample	Date of analysis	Parameters (in $\mu\text{g}/\text{m}^3$)					Wind Direction (from) & Weather
				Total Particulate Matter ($\text{PM}_{10} + >\text{PM}_{10}$)TPM	Particulate Matter (PM_{10})	Particulate Matter ($\text{PM}_{2.5}$)	Sulphur Dioxide (SO_2)	Nitrogen Oxides (as NO_x)	
Apr-24 1st FN	09/04/24-10/04/24	15-04-2024	15/04/24-18/04/24	171	109	53	< 25	< 6	East Sunny
Apr-24 2nd FN	25/04/24-26/04/24	02-05-2024	02/05/24-04/05/24	200	103	73	< 25	< 6	West Sunny
May-24 3rd FN	11/05/24-12/05/24	16-05-2024	16/05/24-18/04/24	205	89	52	< 25	< 6	West Sunny
May-24 4th FN	28/05/24-29/05/24	04-06-2024	04/06/24-06/06/24	217	113	56	< 25	< 6	West Sunny
Jun-24 5th FN	13/06/24-14/06/24	17-06-2024	17/06/24-19/06/24	193	97	47	< 25	< 6	East Sunny
Jun-24 6th FN	26/06/24-27/06/24	01-07-2024	01/07/24-03/07/24	196	115	44	< 25	< 6	East Sunny

Note:

1. Gazette Notification No. G.S.R 742(E) dt.25th Sept.'2000 is applicable in core zone.
2. Gazette Notification No. G.S.R 826 (E) dt.Nov.'2009 is applicable in buffer zone.

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- Note: 1) This Report refers to the values obtained at the time of testing and results related to the items tested
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TEST REPORT

06/24 Test Report No. 1004	Job No. 094323120	Year	FY2024-25
Type of Sample	Ambient Air	Quarter Ending	Jun-24
Customer	CCL		
Mode of Receipt of Sample:	Joint sampling with customer		
Testing/ Sampling Protocol	IS 5182 (part 14): 2000 ,R -2010, Methods for Measurement of Air Pollution, LQR 32		
Remarks & Observation:	All samplers placed 1.5 m above ground level		

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali Project: Amrapali Stations: Honhe Village

Month	Date of Sampling	Date of receipt of sample	Date of analysis	Parameters (in $\mu\text{g}/\text{m}^3$)					Wind Direction (from) & Weather
				*Total Particulate Matter (PM_{10}^+ > PM_{10})/TPM	Particulate Matter (PM_{10})	*Particulate Matter ($\text{PM}_{2.5}$)	Sulphur Dioxide (SO_2)	Nitrogen Oxides (as NO_2)	
Apr-24 1st FN	09/04/24-10/04/24	15-04-2024	15/04/24-18/04/24	144	65	35	< 25	< 6	East Sunny
Apr-24 2nd FN	25/04/24-26/04/24	02-05-2024	02/05/24-04/05/24	146	74	58	< 25	< 6	West Sunny
May-24 3rd FN	11/05/24-12/05/24	16-05-2024	16/05/24-18/04/24	139	67	33	< 25	< 6	West Sunny
May-24 4th FN	28/05/24-29/05/24	04-06-2024	04/06/24-06/06/24	161	78	43	< 25	< 6	West Sunny
Jun-24 5th FN	13/06/24-14/06/24	17-06-2024	17/06/24-19/06/24	190	75	36	< 25	< 6	East Sunny
Jun-24 6th FN	26/06/24-27/06/24	01-07-2024	01/07/24-03/07/24	152	68	32	< 25	< 6	West Sunny

Note:

1. Gazette Notification No. G.S.R 742(E) dt.25th Sept.'2000 is applicable in core zone.
2. Gazette Notification No. G.S.R 826 (E) dt.Nov.'2009 is applicable in buffer zone.



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TEST REPORT

06/24 Test Report No. 1005	Job No. 094323120	Year	FY2024-25
Type of Sample	Ambient Air	Quarter Ending	Jun-24
Customer	CCL		
Mode of Receipt of Sample:	Joint sampling with customer		
Testing/ Sampling Protocol	IS 5182 (part 14): 2000 ,R -2010, Methods for Measurement of Air Pollution, LQR 32		
Remarks & Observation:	All samplers placed 1.5 m above ground level		

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali Project: Amrapali Stations: Ursu Village

Month	Date of Sampling	Date of receipt of sample	Date of analysis	Parameters (in $\mu\text{g}/\text{m}^3$)					Wind Direction (from) & Weather
				*Total Particulate Matter (PM ₁₀ +>PM ₁₀)TPM	Particulate Matter (PM ₁₀)	*Particulate Matter (PM _{2.5})	Sulphur Dioxide (SO ₂)	Nitrogen Oxides (as NO ₂)	
Apr-24 1st FN	09/04/24-10/04/24	15-04-2024	15/04/24-18/04/24	168	74	34	< 25	< 6	East Sunny
Apr-24 2nd FN	25/04/24-26/04/24	02-05-2024	02/05/24-04/05/24	161	68	48	< 25	< 6	West Sunny
May-24 3rd FN	11/05/24-12/05/24	16-05-2024	16/05/24-18/04/24	171	75	40	< 25	< 6	West Sunny
May-24 4th FN	28/05/24-29/05/24	04-06-2024	04/06/24-06/06/24	178	64	29	< 25	< 6	West Sunny
Jun-24 5th FN	13/06/24-14/06/24	17-06-2024	17/06/24-19/06/24	193	69	34	< 25	< 6	East Sunny
Jun-24 6th FN	26/06/24-27/06/24	01-07-2024	01/07/24-03/07/24	188	66	37	< 25	< 6	West Sunny

Note:

1. Gazette Notification No. G.S.R 742(E) dt.25th Sept.'2000 is applicable in core zone.
2. Gazette Notification No. G.S.R 826 (E) dt.Nov.'2009 is applicable in buffer zone.



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TEST REPORT

06/24 Test Report No. 1006	Job No. 094323120	Year	FY2024-25
Type of Sample	Ambient Air	Quarter Ending	Jun-24
Customer	CCL		
Mode of Receipt of Sample:	Joint sampling with customer		
Testing/ Sampling Protocol	IS 5182 (part 14): 2000 ,R -2010, Methods for Measurement of Air Pollution, LQR 32		
Remarks & Observation:	All samplers placed 1.5 m above ground level		

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali **Project:** Amrapali **Stations:** Kumarang Kalan Village

Month	Date of Sampling	Date of receipt of sample	Date of analysis	Parameters (in $\mu\text{g}/\text{m}^3$)					Wind Direction (from) & Weather
				*Total Particulate Matter ($\text{PM}_{10} + >\text{PM}_{10}$)TPM	Particulate Matter (PM_{10})	*Particulate Matter ($\text{PM}_{2.5}$)	Sulphur Dioxide (SO_2)	Nitrogen Oxides (as NO_2)	
Apr-24 1st FN	10/04/24-11/04/24	15-04-2024	15/04/24-18/04/24	124	58	28	< 25	< 6	East Sunny
Apr-24 2nd FN	26/04/24-27/04/24	02-05-2024	02/05/24-04/05/24	129	54	23	< 25	< 6	East Sunny
May-24 3rd FN	11/05/24-12/05/24	16-05-2024	16/05/24-18/04/24	126	60	26	< 25	< 6	North Sunny
May-24 4th FN	29/05/24-30/05/24	04-06-2024	04/06/24-06/06/24	140	72	33	< 25	< 6	South Sunny
Jun-24 5th FN	14/06/24-15/06/24	17-06-2024	17/06/24-19/06/24	164	71	30	< 25	< 6	West Sunny
Jun-24 6th FN	27/06/24-28/06/24	01-07-2024	01/07/24-03/07/24	159	65	27	< 25	< 6	East Sunny

Note:

1. Gazette Notification No. G.S.R 742(E) dt.25th Sept.'2000 is applicable in core zone.
2. Gazette Notification No. G.S.R 826 (E) dt.Nov.'2009 is applicable in buffer zone.

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TEST REPORT

06/24 Test Report No. 1007	Job No. 094323120	Year	FY2024-25
Type of Sample	Ambient Air	Quarter Ending	Jun-24
Customer	CCL		
Mode of Receipt of Sample:	Joint sampling with customer		
Testing/ Sampling Protocol	IS 5182 (part 14): 2000 ,R -2010, Methods for Measurement of Air Pollution, LQR 32		
Remarks & Observation:	All samplers placed 1.5 m above ground level		

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali **Project:** Amrapali **Stations:** Pachra Village

Month	Date of Sampling	Date of receipt of sample	Date of analysis	Parameters (in $\mu\text{g}/\text{m}^3$)					Wind Direction (from) & Weather
				*Total Particulate Matter ($\text{PM}_{10} + >\text{PM}_{10}$)TPM	Particulate Matter (PM_{10})	*Particulate Matter ($\text{PM}_{2.5}$)	Sulphur Dioxide (SO_2)	Nitrogen Oxides (as NO_2)	
Apr-24 1st FN	10/04/24-11/04/24	15-04-2024	15/04/24-18/04/24	143	61	34	< 25	< 6	West Sunny
Apr-24 2nd FN	26/04/24-27/04/24	02-05-2024	02/05/24-04/05/24	155	73	46	< 25	< 6	East Sunny
May-24 3rd FN	11/05/24-12/05/24	16-05-2024	16/05/24-18/04/24	160	66	33	< 25	< 6	North Sunny
May-24 4th FN	29/05/24-30/05/24	04-06-2024	04/06/24-06/06/24	144	65	27	< 25	< 6	South Sunny
Jun-24 5th FN	14/06/24-15/06/24	17-06-2024	17/06/24-19/06/24	177	75	35	< 25	< 6	West Sunny
Jun-24 6th FN	27/06/24-28/06/24	01-07-2024	01/07/24-03/07/24	192	68	32	< 25	< 6	East Sunny

Note:

1. Gazette Notification No. G.S.R 742(E) dt.25th Sept.'2000 is applicable in core zone.
2. Gazette Notification No. G.S.R 826 (E) dt.Nov.'2009 is applicable in buffer zone.



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TEST REPORT

06/24 Test Report No. 1008	Job No. 094323120	Year	FY2024-25
Type of Sample:	Noise	Quarter Ending	Jun-24
Customer	CCL		
Testing/ Sampling Protocol	'The noise pollution (Regulation and Control), Rules,2000, LQR 34		
Remarks:			

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali Project: Amrapali

Station Name	Noise Level dB(A) Leq					
	Apr-24 1st FN	Apr-24 2nd FN	May-24 3rd FN	May-24 4th FN	Jun-24 5th FN	Jun-24 6th FN
	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night
Date of recording	08-04-2024	24-04-2024	10-05-2024	27-05-2024	13-06-2024	25-06-2024
1. Site Office	45.7/40.3	40.5/35.4	54.3/49.6	55.4/50.8	41.3/36.4	48.2/42.1
Date of recording	09-04-2024	25-04-2024	11-05-2024	28-05-2024	13-06-2024	26-06-2024
2. Weight Bridge	46.4/41.5	41.3/36.4	56.7/50.8	57.1/52.3	50.2/46.5	47.3/41.4
Date of recording	09-04-2024	25-04-2024	11-05-2024	28-05-2024	13-06-2024	26-06-2024
3. Binglath Checkpost	49.6/43.2	45.7/40.2	55.4/51.2	56.9/50.4	52.7/48.6	49.7/43.5
Date of recording	09-04-2024	25-04-2024	11-05-2024	28-05-2024	13-06-2024	26-06-2024
4. Weight Bridge near hone nala	48.7/42.4	42.1/37.2	54.8/49.8	56.6/51.8	42.1/37.5	44.6/40.4
Date of recording	09-04-2024	25-04-2024	11-05-2024	28-05-2024	13-06-2024	26-06-2024
5. Honhe Village	47.5/41.3	38.7/32.8	49.9/46.4	51.3/47.5	40.2/36.4	43.3/37.2
Date of recording	09-04-2024	25-04-2024	11-05-2024	28-05-2024	13-06-2024	26-06-2024
6. Ursu Village	46.7/42.8	37.6/31.4	50.1/46.5	50.9/46.4	39.7/34.3	42.5/36.6
Date of recording	10-04-2024	26-04-2024	11-05-2024	29-05-2024	14-06-2024	27-06-2024
7. Kumarang Kalan Village	46.7/42.5	38.2/32.5	50.3/47.1	50.7/47.1	40.5/36.3	41.5/35.6
Date of recording	10-04-2024	26-04-2024	11-05-2024	29-05-2024	14-06-2024	27-06-2024
8. Pachra Village	45.8/40.6	37.3/31.4	48.5/44.6	49.9/46.2	39.6/35.7	40.5/34.8

Ambient Air Quality Standards in respect of Noise as per 'The noise pollution (Regulation and Control), Rules,2000		
Time Frame	Limits in dB(A) Leq	
	Day Time 6.00 AM to 10.00 PM	Night Time 10.00 PM to 6.00 AM
Industrial Area	75	70
Commercial Area	65	55
Residential area	55	45
Silence Zone	50	40



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TEST REPORT

06/24 Test Report No. 1009	Job No. 094323120	Year	FY2024-25
Type of Sample:	Effluent Water	Quarter Ending	Jun-24
Customer	CCL		
Mode of Receipt of Sample:	Joint sampling with customer		
Testing/ Sampling Protocol	MOEF -SCH-VI STANDARDS, Class 'A', LQR 33		
Remarks & Observation:	Samples received in 5 ltr plastic Jerri cane, Colour as observed is transparent		

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali **Project:** Amrapali **Stations:** Mine Water

Analysis Results of FN Effluent Water							
Parameters →				COD	O & G	pH value	TSS
Detection Limit				4	2	0.2	10
MOEF -SCH-VI, STANDARDS, Class 'A'				250	10	5.5 to 9.0	100
Month	Date of Sampling	Date of Receipt of Sample	Date of Analysis	Value in mg/l, except pH			
Apr-24 1st FN	11/04/24	15/04/24	15/04/24-30/04/24	16	<2.00	7.9	31
Apr-24 2nd FN	27/04/24	02/05/24	02/05/24-16/05/24	8	<2.00	7.7	29
May-24 3rd FN	12/05/24	16/05/24	16/05/24-03/06/24	20	<2.00	7.5	33
May-24 4th FN	30/05/24	04/06/24	04/06/24-14/06/24	12	<2.00	7.3	40
Jun-24 5th FN	14/06/24	17/06/24	17/06/24-01/07/24	16	<2.00	7.8	36
Jun-24 6th FN	28/06/24	01/07/24	01/07/24-15/07/24	8	<2.00	6.7	38
BIS Standard & Method				APHA, 23rd Edition, Closed Reflux, Titrimetric Method, 2017	IS 3025/39:1991, R : 2003, Partition Gravimetric	IS-3025/11:1983, R-1996, Electrometric	IS 3025/17:1984, R :1996, Gravimetric Method



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TEST REPORT

06/24 Test Report No. 1010	Job No. 094323120	Year	FY2024-25
Type of Sample:	Effluent Water	Quarter Ending	Jun-24
Customer	CCL		
Mode of Receipt of Sample:	Joint sampling with customer		
Testing/ Sampling Protocol	MOEF -SCH-VI STANDARDS, Class 'A', LQR 33		
Remarks & Observation:	Samples received in 5 ltr plastic Jerri cane, Colour as observed is transparent		

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali Project: Amrapali Stations: Work Shop

Analysis Results of FN Effluent Water							
Parameters →				COD	O & G	pH value	TSS
Detection Limit				4	2	0.2	10
MOEF -SCH-VI, STANDARDS, Class 'A'				250	10	5.5 to 9.0	100
Month	Date of Sampling	Date of Receipt of Sample	Date of Analysis	Value in mg/l, except pH			
Apr-24 1st FN	11/04/24	15/04/24	15/04/24-30/04/24	84	3.2	7.5	181
Apr-24 2nd FN	27/04/24	02/05/24	02/05/24-16/05/24	80	2.6	8	176
May-24 3rd FN	12/05/24	16/05/24	16/05/24-03/06/24	76	202	7.9	192
May-24 4th FN	30/05/24	04/06/24	04/06/24-14/06/24	96	3	8	185
Jun-24 5th FN	14/06/24	17/06/24	17/06/24-01/07/24	68	2.8	7.3	164
Jun-24 6th FN	28/06/24	01/07/24	01/07/24-15/07/24	84	2.4	7.1	173
BIS Standard & Method				APHA, 23rd Edition, Closed Reflux, Titrimetric Method, 2017	IS 3025/39:1991, R : 2003, Partition Gravimetric	IS-3025/11:1983, R-1996, Electrometric	IS 3025/17:1984, R :1996, Gravimetric Method

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TEST REPORT

06/24 Test Report No. 1011	Job No. 094323120	Year	FY2024-25
Type of Sample:	Surface Water	Quarter Ending	Jun-24
Customer	CCL	Date of Receipt:	15-04-2024
Mode of Receipt of Sample:	Joint sampling with customer	Date of Analysis:	15.04.24-04.06.24
Testing/ Sampling Protocol	LQR 33		
Remarks & Observation:	Samples received in 5 ltr plastic Jerri cane, Colour as observed is transparent		

TEST RESULT

The sample has been tested with the following results: -

Area :	Amrapali	Project:	Amrapali
Stations:	1. Hone Nala U/S 2. Hone Nala D/S 3. Barki River	Date of Sampling:	11-04-2024 11-04-2024 11-04-2024

Sl.No	Parameter	Sampling Stations				Detection Limit	BIS Standard & Method
		1	2	3	4		
1	Arsenic (as As), mg/l	<0.002	<0.002	<0.002		0.002	IS 3025/37:1988 R : 2003, AAS-VGA, Method
2	BOD (3 days 27°C), mg/l	<2.0	<2.0	<2.0		2.00	IS 3025 /44: 1993, R: 2003 3 day incubation at 27°C
3	Cadmium(as Cd), mg/l	<0.0004	<0.0004	<0.0004		0.0004	APHA, 23rd Edition AAS-GTA Method, 2017
4	Chlorides (as Cl ⁻), mg/l	20	14	20		2.00	IS-3025/32:1988, R-2007, Argentometric Method
5	Copper (as Cu), mg/l	<0.02	<0.02	<0.02		0.02	IS 3025/42: 1992, R : 2009, AAS (Air-Ac-Flame)
6	Disolved Oxygen	6.9	6.8	6.5		0.10	IS 3025/38: 1989, R:2003, Winkler Azide Method
7	Fluoride (as F ⁻) mg/l	0.9	0.77	0.95		0.02	APHA, 23rd Edition, SPADNS Method, 2017
8	Hexavalent Chromium, mg/l	<0.01	<0.01	<0.01		0.01	APHA, 23rd Edition, Diphenylcarbohydrazide, 2017
9	Iron (as Fe), mg/l	<0.04	<0.04	<0.04		0.04	IS 3025 /53: 2003, R : 2009, AAS (Air-Ac-Flame)
10	Lead (as Pb), mg/l	<0.001	<0.001	<0.001		0.001	APHA, 23rd Edition AAS-GTA Method, 2017
11	Nitrate (as NO ₃ ⁻), mg/l	3.11	0.99	2.47		0.50	APHA, 23rd Edition, UV - Spectrophotometric, 2017
12	pH value	8.1	8	8		1.0	IS-3025/11:1983, R-1996, Electrometric Method
13	Phenolic compounds (as C ₆ H ₅ OH), mg/l	<0.001	<0.001	<0.001		0.001	APHA, 23rd Edition, 4- Amino Antipyrine Method, 2017
14	Selenium (as Se), mg/l	<0.0005	<0.0005	<0.0005		0.0005	IS 3025/56:2003 AAS-VGA Method
15	Sulphate (as SO ₄ ⁻²) mg/l	16	5	393		2.00	APHA, 23rd Edition Turbidity Method, 2017
16	Total Dissolved Solids, mg/l	212	218	525		25.00	IS 3025 /16:1984 R : 2006, Gravimetric Method
17	Total Suspended Solids, mg/l	56	61	55		10.00	IS 3025 /17:1984, R :1996, Cravimetric Method
18	Zinc (as Zn), mg/l	<0.005	<0.005	0.005		0.005	IS 3025 /49: 1994, R : 2009, AAS (Air-Ac-Flame)



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TEST REPORT

06/24 Test Report No. 1012	Job No. 094323120	Year	FY2024-25
Type of Sample:	Surface Water	Quarter Ending	Jun-24
Customer	CCL	Date of Receipt:	15-04-2024
Mode of Receipt of Sample:	Joint sampling with customer	Date of Analysis:	15.04.24-04.06.24
Testing/ Sampling Protocol	LQR 33		
Remarks & Observation:	Samples received in 5 ltr plastic Jerri cane, Colour as observed is transparent		

TEST RESULT

The sample has been tested with the following results: -

Area : **Amrapali** Project: **Amrapali**
 Stations: **4. Dudhmatia Nallah U/S** Date of Sampling: **11-04-2024**
5. Dudhmatia Nallah D/S **11-04-2024**

Sl.No	Parameter	Sampling Stations			Detection Limit	BIS Standard & Method
		4	5			
1	Arsenic (as As), mg/l	<0.002	<0.002		0.002	IS 3025/37:1988 R : 2003, AAS-VGA, Method
2	BOD (3 days 27°C), mg/l	<2.0	<2.0		2.00	IS 3025 /44: 1993, R: 2003 3 day incubation at 27°C
3	Cadmium(as Cd), mg/l	<0.0004	<0.0004		0.0004	APHA, 23rd Edition AAS-GTA Method, 2017
4	Chlorides (as Cl ⁻), mg/l	14	14		2.00	IS-3025/32:1988, R-2007, Argentometric Method
5	Copper (as Cu), mg/l	<0.02	<0.02		0.02	IS 3025/42: 1992, R : 2009, AAS (Air-Ac-Flame)
6	Disolved Oxygen	6.6	6		0.10	IS 3025/38: 1989, R:2003, Winkler Azide Method
7	Fluoride (as F ⁻) mg/l	0.74	0.76		0.02	APHA, 23rd Edition, SPADNS Method, 2017
8	Hexavalent Chromium, mg/l	<0.01	<0.01		0.01	APHA, 23rd Edition, Diphenylcarbohydrazide, 2017
9	Iron (as Fe), mg/l	<0.04	<0.04		0.04	IS 3025 /53: 2003, R : 2009, AAS (Air-Ac-Flame)
10	Lead (as Pb), mg/l	<0.001	<0.001		0.001	APHA, 23rd Edition AAS-GTA Method, 2017
11	Nitrate (as NO ₃ ⁻), mg/l	1.05	0.03		0.50	APHA, 23rd Edition, UV - Spectrophotometric, 2017
12	pH value	8.2	8.1		1.0	IS-3025/11:1983, R-1996, Electrometric Method
13	Phenolic compounds (as C ₆ H ₅ OH), mg/l	<0.001	<0.001		0.001	APHA, 23rd Edition, 4- Amino Antipyrine Method, 2017
14	Selenium (as Se), mg/l	<0.0005	<0.0005		0.0005	IS 3025/56:2003 AAS-VGA Method
15	Sulphate (as SO ₄ ⁻²) mg/l	24	5		2.00	APHA, 23rd Edition Turbidity Method, 2017
16	Total Dissolved Solids, mg/l	209	214		25.00	IS 3025 /16:1984 R : 2006, Gravimetric Method
17	Total Suspended Solids, mg/l	18	52		10.00	IS 3025 /17:1984, R :1996, Gravimetric Method
18	Zinc (as Zn), mg/l	<0.005	<0.005		0.005	IS 3025 /49: 1994, R : 2009, AAS (Air-Ac-Flame)



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TEST REPORT

06/24 Test Report No. 1014	Job No. 094323120	Year	FY2024-25
Type of Sample	Ambient Air	Quarter Ending	Jun-24
Customer	CCL		
Mode of Receipt of Sample:	Joint sampling with customer		
Testing/ Sampling Protocol	IS 5182 (part 14): 2000 ,R -2010, Methods for Measurement of Air Pollution, LQR 32		
Remarks & Observation:	All samplers placed 1.5 m above ground level		

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali Project: Amrapali Siding Stations: Sivpur Siding-1

Month	Date of Sampling	Date of receipt of sample	Date of analysis	Parameters (in $\mu\text{g}/\text{m}^3$)					Wind Direction (from) & Weather
				*Total Particulate Matter ($\text{PM}_{10} + >\text{PM}_{10}$) /TPM	Particulate Matter (PM_{10})	*Particulate Matter ($\text{PM}_{2.5}$)	Sulphur Dioxide (SO_2)	Nitrogen Oxides (as NO_2)	
Apr-24 1st FN	10/04/24-11/04/24	15-04-2024	15/04/24-18/04/24	220	126	51	< 25	< 6	East Sunny
Apr-24 2nd FN	26/04/24-27/04/24	02-05-2024	15/04/24-18/04/24	208	111	67	< 25	< 6	West Sunny
May-24 3rd FN	11/05/24-12/05/24	16-05-2024	15/04/24-18/04/24	196	86	46	< 25	< 6	North Sunny
May-24 4th FN	29/05/24-30/05/24	04-06-2024	04/06/24-06/06/24	205	102	51	< 25	< 6	South Sunny
Jun-24 5th FN	14/06/24-15/06/24	17-06-2024	17/06/24-19/06/24	213	111	52	< 25	< 6	West Sunny
Jun-24 6th FN	27/06/24-28/06/24	01-07-2024	01/07/24-03/07/24	206	110	47	< 25	< 6	East Sunny

Note:

1. Gazette Notification No. G.S.R 742(E) dt.25th Sept.'2000 is applicable in core zone.
2. Gazette Notification No. G.S.R 826 (E) dt.Nov.'2009 is applicable in buffer zone.

Analysed By

Authorized Signatory

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TEST REPORT

06/24 Test Report No. 1015	Job No. 094323120	Year	FY2024-25
Type of Sample	Ambient Air	Quarter Ending	Jun-24
Customer	CCL		
Mode of Receipt of Sample:	Joint sampling with customer		
Testing/ Sampling Protocol	IS 5182 (part 14): 2000 ,R -2010, Methods for Measurement of Air Pollution, LQR 32		
Remarks & Observation:	All samplers placed 1.5 m above ground level		

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali Project: Amrapali Stations: Sivpur Siding-2
Siding

Month	Date of Sampling	Date of receipt of sample	Date of analysis	Parameters (in µg/m ³)					Wind Direction (from) & Weather
				*Total Particulate Matter (PM ₁₀ + >PM ₁₀)/TPM	Particulate Matter (PM ₁₀)	*Particulate Matter (PM _{2.5})	Sulphur Dioxide (SO ₂)	Nitrogen Oxides (as NO ₂)	
Apr-24 1st FN	10/04/24-11/04/24	15-04-2024	15/04/24-18/04/24	224	112	42	< 25	< 6	West Sunny
Apr-24 2nd FN	26/04/24-27/04/24	02-05-2024	15/04/24-18/04/24	212	98	60	< 25	< 6	West Sunny
May-24 3rd FN	11/05/24-12/05/24	16-05-2024	15/04/24-18/04/24	218	91	28	< 25	< 6	North Sunny
May-24 4th FN	29/05/24-30/05/24	04-06-2024	04/06/24-06/06/24	206	109	32	< 25	< 6	South Sunny
Jun-24 5th FN	14/06/24-15/06/24	17-06-2024	17/06/24-19/06/24	209	94	35	< 25	< 6	East Sunny
Jun-24 6th FN	27/06/24-28/06/24	01-07-2024	01/07/24-03/07/24	223	100	32	< 25	< 6	West Sunny

Note:

1. Gazette Notification No. G.S.R 742(E) dt.25th Sept.'2000 is applicable in core zone.
2. Gazette Notification No. G.S.R 826 (E) dt.Nov.'2009 is applicable in buffer zone.

Analysed By

Authorized Signatory

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06/24 Test Report No. 1016	Job No. 094323120	Year	FY2024-25
Type of Sample:	Noise	Quarter Ending	Jun-24
Customer	CCL		
Testing/ Sampling Protocol	The noise pollution (Regulation and Control), Rules,2000, LQR 34		
Remarks:			


TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali **Project:** Amrapali Siding

Station Name	Noise Level dB(A) Leq					
	Apr-24 1st FN	Apr-24 2nd FN	May-24 3rd FN	May-24 4th FN	Jun-24 5th FN	Jun-24 6th FN
	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night
Date of recording	08-04-2024	24-04-2024	10-05-2024	27-05-2024	13-06-2024	25-06-2024
1. Shivpur Siding-1	45.7/40.3	40.5/35.4	54.3/49.6	55.4/50.8	41.3/36.4	48.2/42.1
Date of recording	09-04-2024	25-04-2024	11-05-2024	28-05-2024	13-06-2024	26-06-2024
2. Shivpur Siding-2	46.4/41.5	41.3/36.4	56.7/50.8	57.1/52.3	50.2/46.5	47.3/41.4
Date of recording	09-04-2024	25-04-2024	11-05-2024	28-05-2024	13-06-2024	26-06-2024

Ambient Air Quality Standards in respect of Noise as per 'The noise pollution (Regulation and Control), Rules,2000		
Time Frame	Limits in dB(A) Leq	
	Day Time 6.00 AM to 10.00 PM	Night Time 10.00 PM to 6.00 AM
Industrial Area	75	70
Commercial Area	65	55
Residential area	55	45
Silence Zone	50	40

 Analysed By

Authorized Signatory

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TEST REPORT

06/24 Test Report No. Metal / 01	Job No. 094323120	2024-25
Type of Sample	Ambient Air	Quarter Ending
Customer	CCL	Date of Receipt of Sample:
Mode of Receipt of Sample:	Joint sampling with customer	Date of Analysis:
Sampling Protocol:	USEPA IO-3.2: 1999, LQR 32	06/05/24-15/06/24
Remarks & Observation:	All samplers placed 1.5 m above ground level	

TEST RESULT

The sample has been tested with the following results: -

Area : Amarpali **Project:** Amarpali OCP

Stations:

1. Site Office
2. Weight Bridge
3. Binglath Checkpost
4. Weight Bridge Near Hone Nala

Date of Sampling:
 08-09/04/2024
 09-10/04/2024
 09-10/04/2024
 09-10/04/2024

S.No	Test Parameters	Units	Test Result				Method detection Limit	Limit (NAAQS -2011)	Test Method
			1	2	3	4			
	Stations:								
1	Conc. of As in Air	ng/m ³	1.09	0.61	0.90	0.76	0.1	6.00	USEPA IO-3.2:1999
2	Conc. of Ni in Air	ng/m ³	6.16	6.58	4.41	6.15	0.1	20.00	USEPA IO-3.2:1999
3	Conc. of Pb in Air	µg/m ³	0.019	0.029	0.013	0.051	0.005	1.0	USEPA IO-3.2: 1999
4	Conc. of Cu in Air	ng/m ³	0.17	0.28	0.36	0.87	0.1	-	USEPA IO-3.2: 1999
5	Conc. of Cd in Air	ng/m ³	0.024	0.067	0.094	0.027	0.02	-	USEPA IO-3.2: 1999
6	Conc. of Cr in Air	ng/m ³	0.15	0.16	0.12	0.23	0.1	-	USEPA IO-3.2: 1999
7	Conc. of Hg in Air	ng/m ³	<0.005	<0.005	<0.005	<0.005	0.005	-	USEPA IO-3.2: 1999



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TEST REPORT

06/24 Test Report No. Metal/02		Job No. 094323120	2024-25
Type of Sample	Ambient Air	Quarter Ending	June '24
Customer	CCL	Date of Receipt of Sample:	15/04/24
Mode of Receipt of Sample:	Joint sampling with customer	Date of Analysis:	06/05/24-15/06/24
Sampling Protocol:	USEPA IO-3.2: 1999, LQR 32		
Remarks & Observation:	All samplers placed 1.5 m above ground level		

TEST RESULT

The sample has been tested with the following results: -

Area :	Amarpali	Project:	Amarpali OCP
Stations:	5.Hone Village 6.Ursu Village 7.Kumarang Kalam Village 8.Pachra Village		Date of Sampling: 09-10/04/2024 09-10/04/2024 10-11/04/2024 10-11/04/2024

S.No	Test Parameters	Units	Test Result				Meth od detect ion Limit	Limit (NAAQ S-2011)	Test Method
			5	6	7	8			
	Stations:		5	6	7	8			
1	Conc. of As in Air	ng/m ³	0.73	0.34	1.02	0.82	0.1	6.00	USEPA IO-3.2:1999
2	Conc. of Ni in Air	ng/m ³	2.54	3.92	2.05	1.97	0.1	20.00	USEPA IO-3.2:1999
3	Conc. of Pb in Air	µg/m ³	0.012	0.013	0.010	0.007	0.005	1.0	USEPA IO-3.2: 1999
4	Conc. of Cu in Air	ng/m ³	0.31	0.23	0.22	0.11	0.1	-	USEPA IO-3.2: 1999
5	Conc. of Cd in Air	ng/m ³	0.089	<0.02	0.110	0.063	0.02	-	USEPA IO-3.2: 1999
6	Conc. of Cr in Air	ng/m ³	0.17	0.21	0.15	0.16	0.1	-	USEPA IO-3.2: 1999
7	Conc. of Hg in Air	ng/m ³	<0.005	<0.005	<0.005	<0.005	0.005	-	USEPA IO-3.2: 1999



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Annexure:- 11



Pollution Under Control Certificate

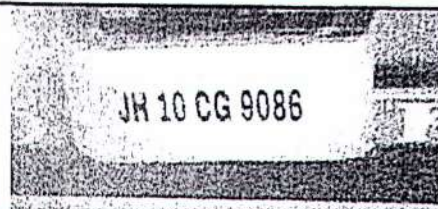
Authorised By :
Government of Chhattisgarh

Date : 07/02/2024
Time : 12:04:07 PM
Validity upto : 06/02/2025



Certificate SL. No. : CG00400190015144
Registration No. : JH10CG9086
Date of Registration : 27/Aug/2021
Month & Year of Manufacturing : July-2021
Valid Mobile Number : *****6787
Emission Norms : BHARAT STAGE VI
Fuel : DIESEL
PUC Code : CG0040019
GSTIN :
Fees : Rs.150.00
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	
Smoke Density	Lambda	-	1 ± 0.03	
	Light absorption coefficient	1/metre	0.7	0.43

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



Form 59

[See rules 115 (2)]

Pollution Under Control Certificate

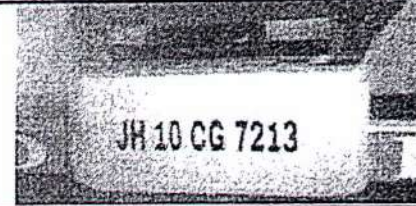
Authorised By :
Government of Chhattisgarh

Date : 07/02/2024
Time : 12:05:06 PM
Validity upto : 06/02/2025



Certificate SL. No. : CG00400190015145
Registration No. : JH10CG7213
Date of Registration : 27/Aug/2021
Month & Year of Manufacturing : July-2021
Valid Mobile Number : *****9879
Emission Norms : BHARAT STAGE VI
Fuel : DIESEL
PUC Code : CG0040019
GSTIN :
Fees : Rs.150.00
(GST to be paid extra as applicable)
MIL observation : 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	0.44

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

Form 59

[See rules 115 (2)]

Pollution Under Control Certificate

Authorised By :
Government of Chhattisgarh

Date : 07/02/2024
Time : 12:06:08 PM
Validity upto : 06/02/2025



Certificate SL. No. : CG00400190015146
Registration No. : JH10CG2283
Date of Registration : 27/Aug/2021
Month & Year of Manufacturing : July-2021
Valid Mobile Number : *****6787
Emission Norms : BHARAT STAGE VI
Fuel : DIESEL
PUC Code : CG0040019
GSTIN :
Fees : Rs.150.00
(GST to be paid extra as applicable)
MIL observation : 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	
Smoke Density	Lambda	-	1 ± 0.03	
	Light absorption coefficient	1/metre	0.7	0.36

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

Form 59

[See rules 115 (2)]

1004

Pollution Under Control Certificate

Authorised By :
Government of Chhattisgarh

Date : 07/02/2024
Time : 12:01:49 PM
Validity upto : 06/02/2025



Certificate SL. No. : CG00400190015142
Registration No. : JH10CG5534
Date of Registration : 27/Aug/2021
Month & Year of Manufacturing : July-2021
Valid Mobile Number : *****9879
Emission Norms : BHARAT STAGE VI
Fuel : DIESEL
PUC Code : CG0040019
GSTIN :
Fees : Rs.150.00
(GST to be paid extra as applicable)
MIL observation : 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	
Smoke Density	Lambda	-	1 ± 0.03	
	Light absorption coefficient	1/metre	0.7	0.5

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



Form 59

[See rules 115 (2)]

Pollution Under Control Certificate

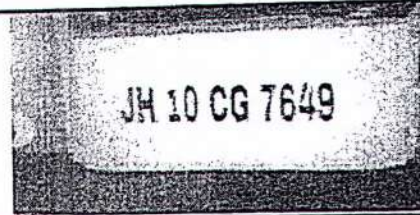
Authorised By :
Government of Chhattisgarh

Date : 07/02/2024
Time : 12:34:13 PM
Validity upto : 06/02/2025



Certificate SL. No. : CG00400210015930
Registration No. : JH10CG7649
Date of Registration : 27/Aug/2021
Month & Year of Manufacturing : July-2021
Valid Mobile Number : *****9896
Emission Norms : BHARAT STAGE VI
Fuel : DIESEL
PUC Code : CG0040021
GSTIN :
Fees : Rs.150.00
(GST to be paid extra as applicable)
MIL observation : 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	0.52

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

Annexure:- 12



TEST REPORT

06/24 Test Report No. 1009	Job No. 094323120	Year	FY2024-25
Type of Sample:	Effluent Water	Quarter Ending	Jun-24
Customer	CCL		
Mode of Receipt of Sample:	Joint sampling with customer		
Testing/ Sampling Protocol	MOEF -SCH-VI STANDARDS, Class 'A', LQR 33		
Remarks & Observation:	Samples received in 5 ltr plastic Jerri cane, Colour as observed is transparent		

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali **Project:** Amrapali **Stations:** Mine Water

Analysis Results of FN Effluent Water							
Parameters →				COD	O & G	pH value	TSS
Detection Limit				4	2	0.2	10
MOEF -SCH-VI, STANDARDS, Class 'A'				250	10	5.5 to 9.0	100
Month	Date of Sampling	Date of Receipt of Sample	Date of Analysis	Value in mg/l, except pH			
Apr-24 1st FN	11/04/24	15/04/24	15/04/24-30/04/24	16	<2.00	7.9	31
Apr-24 2nd FN	27/04/24	02/05/24	02/05/24-16/05/24	8	<2.00	7.7	29
May-24 3rd FN	12/05/24	16/05/24	16/05/24-03/06/24	20	<2.00	7.5	33
May-24 4th FN	30/05/24	04/06/24	04/06/24-14/06/24	12	<2.00	7.3	40
Jun-24 5th FN	14/06/24	17/06/24	17/06/24-01/07/24	16	<2.00	7.8	36
Jun-24 6th FN	28/06/24	01/07/24	01/07/24-15/07/24	8	<2.00	6.7	38
BIS Standard & Method				APHA, 23rd Edition, Closed Reflux, Titrimetric Method, 2017	IS 3025/39:1991, R : 2003, Partition Gravimetric	IS-3025/11:1983, R-1996, Electrometric	IS 3025/17:1984, R :1996, Gravimetric Method



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TEST REPORT

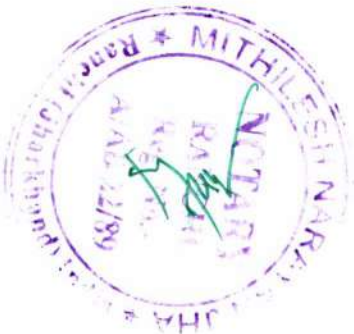
06/24 Test Report No. 1010	Job No. 094323120	Year	FY2024-25
Type of Sample:	Effluent Water	Quarter Ending	Jun-24
Customer	CCL		
Mode of Receipt of Sample:	Joint sampling with customer		
Testing/ Sampling Protocol	MOEF -SCH-VI STANDARDS, Class 'A', LQR 33		
Remarks & Observation:	Samples received in 5 ltr plastic Jerri cane, Colour as observed is transparent		

TEST RESULT

The sample has been tested with the following results: -

Area : Amrapali **Project:** Amrapali **Stations:** Work Shop

Analysis Results of FN Effluent Water							
Parameters →				COD	O & G	pH value	TSS
Detection Limit				4	2	0.2	10
MOEF -SCH-VI, STANDARDS, Class 'A'				250	10	5.5 to 9.0	100
Month	Date of Sampling	Date of Receipt of Sample	Date of Analysis	Value in mg/l, except pH			
Apr-24 1st FN	11/04/24	15/04/24	15/04/24-30/04/24	84	3.2	7.5	181
Apr-24 2nd FN	27/04/24	02/05/24	02/05/24-16/05/24	80	2.6	8	176
May-24 3rd FN	12/05/24	16/05/24	16/05/24-03/06/24	76	202	7.9	192
May-24 4th FN	30/05/24	04/06/24	04/06/24-14/06/24	96	3	8	185
Jun-24 5th FN	14/06/24	17/06/24	17/06/24-01/07/24	68	2.8	7.3	164
Jun-24 6th FN	28/06/24	01/07/24	01/07/24-15/07/24	84	2.4	7.1	173
BIS Standard & Method				APHA, 23rd Edition, Closed Reflux, Titrimetric Method, 2017	IS 3025/39:1991, R : 2003, Partition Gravimetric	IS-3025/11:1983, R-1996, Electrometric	IS 3025/17:1984, R :1996, Gravimetric Method



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Annexure:- 13





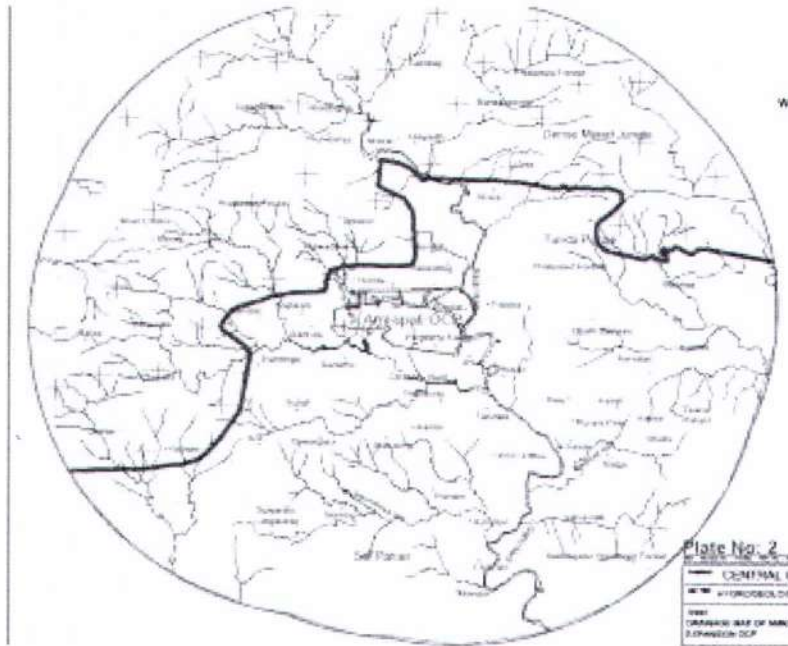
सीएमपीडीआई
cmpdi

A Mini Ratna Company

**Riverine Ecosystem Conservation and Management Plan
of
AMRAPALI EXPANSION OCP (PHASE-I)**

**(Magadh-Amrapali Area)
(Project Area:619.87 Ha
Capacity: 25 MTPA)**

**CENTRAL COALFIELDS LIMITED
(A Subsidiary of Coal India Limited)**



February 2020

**Central Mine Planning and Design Institute Limited
Gondwana Place, Kanke Road, Ranchi**



Prepared by CMPDI, RI-III, Ranchi

Riverine Ecosystem Conservation and Management Plan of Amrapali Expansion OCP (Phase-I)
Magadh-Amrapali Area, Central Coalfields Limited



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Chapter 1 Introduction

1.1 Background of the Project

Amrapali OCP (14.40 MTPA) is an existing project in Chatra District of Jharkhand, administratively under Magadh-Amrapali Area of CCL. This project has obtained Environmental clearance for 14.40 MTPA from MoEFCC vide letter no: J-11015/109/2003-IA-II (M) dt. 20.03.2020

The proposal for expansion of Amrapali OCP (Phase-I) (from 14.40 MTPA to 25.00 MTPA) within the project area of 619.87 Ha. Was submitted to MoEFCC as per EIA Notification, 2006.

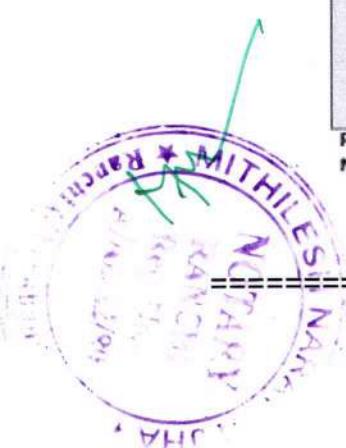
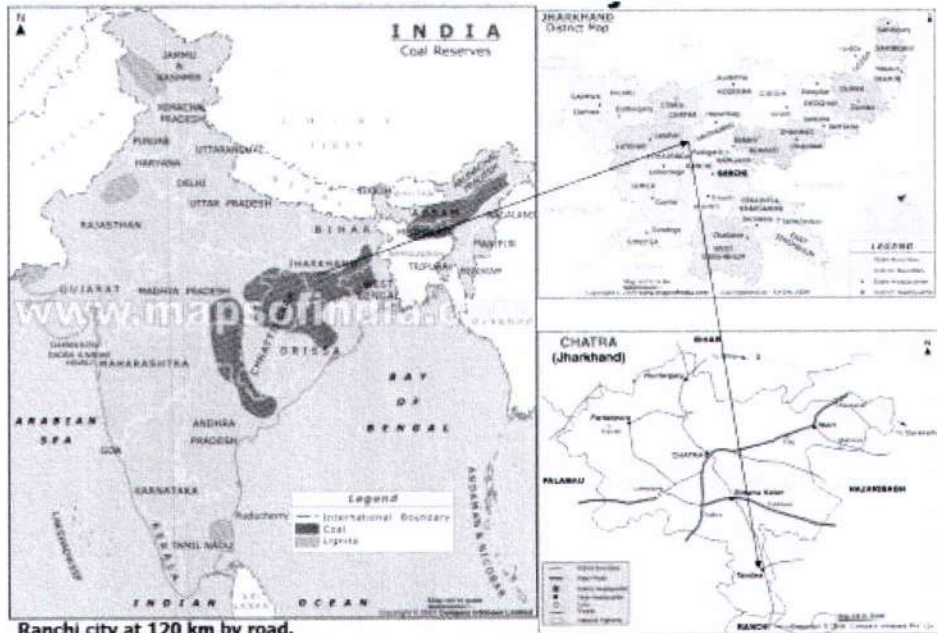
1.2 Brief Description of Nature and Size of the Project

Amrapali Expansion OCP (Phase-I) is an expansion of existing opencast coal-mining project. The proposed project will run with a rated capacity of 25.00 MTPA within the project area of 619.87 Ha. and a mine life of 04 years (As on 31.03.2020). The project consists of two geological blocks namely, Amrapali and Kishanpur.

1.3 Location Details

1.3.1 General Location

The project is located in northern fringe of North Karanpura Coalfields of Central Coalfields Limited, Jharkhand. This project located in the CD block Tandwa of Chatra Dist., Jharkhand.



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**Riverine Ecosystem Conservation and Management Plan of Amrapali Expansion OCP (Phase-I)
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1.3.2 Specific Location

Proposed Amrapali OCP is located in the northern fringe of the N.K. coalfield and lies in the Chatra District of Jharkhand. The Amrapali block covering an area of 10.11 sq.Km (coal bearing 9.28 sq. Km) is bounded by Latitude 23° 51' 31" & 23° 53' 38" N and Longitude 85° 00' 05" & 85° 02' 07" E. The Kishanpur block (5.89 sq. Km) having coal bearing area of 5.45 Sq.Km is limited by the Latitude 23° 51' 58" & 23° 53' 30" N and Longitude 84° 58' 55" and 85° 00' 05" E. The Amrapali OCP is enclosed by Pachra block on the east and Koed block on the west. This project is covered by Survey of India Topo Sheet No.73-A/13(RF 1:50000).

1.3.3 Project Boundary & Project Site Layout

a) Northern Boundary

The northern floor boundary has been fixed along the incrop of seam-I (B)/(IB+IM+IT) Combined.

b) Eastern Boundary

The eastern surface boundary has been fixed leaving a surface barrier of 60m from Barki River.

c) Southern Boundary

The Southern surface boundary has been fixed limiting the quarry boundary within the acquired forest land of 531.64 ha.

d) Western Boundary

The western surface boundary has been fixed leaving a surface barrier of 60m from Bahutchuha nala.



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Chapter 2

Description Riverine System

2.1 Watershed Description

2.1.1 General Topography

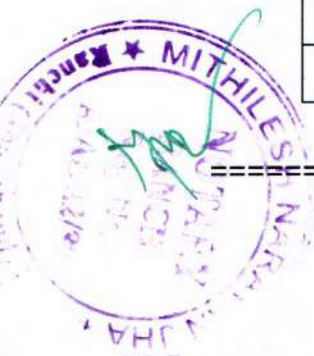
The Amrapali and Kishanpur blocks are characterized by more or less flat terrain with gentle undulation. In general ground slopes towards south. The maximum and minimum elevation for Amrapali block varies from 497 to 440m and for Kishanpur block 501 to 449m.

2.1.2 Drainage Pattern of the Study Area

The project area lies in the catchment area of the Barki nadi in the east and Chundru nadi in the south, which are the tributaries of the master drainage Garhi nadi flows towards south. The southerly flowing Barki nadi is a 5th order stream, meet Chundru nadi to form Garhi nadi at a distance of around 500m. The Barki nadi consists of 124 nos. of 1st order streams, 37 nos. of 2nd order streams, 8 no. of 3rd order streams and 2 no. of 4th order streams. The easterly flowing Chundru nadi is a 5th order stream, in south of the project to meet Garhi nadi. The Chundru nadi consists of 144 nos. of 1st order streams, 38 nos. of 2nd order streams, 3 no. of 3rd order streams and 4 no. of 4th order streams. The leasehold area of Amrapali Expansion OCP is 6.1987 sq.km (619.87 Ha) whereas the quarriable area is about 4.2522 sq.km (425.22 Ha). The leasehold area falls in the watershed of Chundru nadi (Watershed area: 77.18 sq km) is 3.25 sq km (4.21%) whereas, around 2.95 sq.km (3.36%) quarry area falls in the Barki nadi watershed (Watershed area: 87.72 sq km). Mining of this small portion will hardly have any impact on the topography and drainage of the area (quantitatively).

Details of Chundru and Barki nadi Catchment Area

Particulars	Chundru nadi	Barki nadi
1 st Order	144	124
2 nd Order	38	37
3 rd Order	3	8
4 th Order	4	2
Order of Stream	5 th Order	5 th Order
Parent Drainage	Garhi Nadi	



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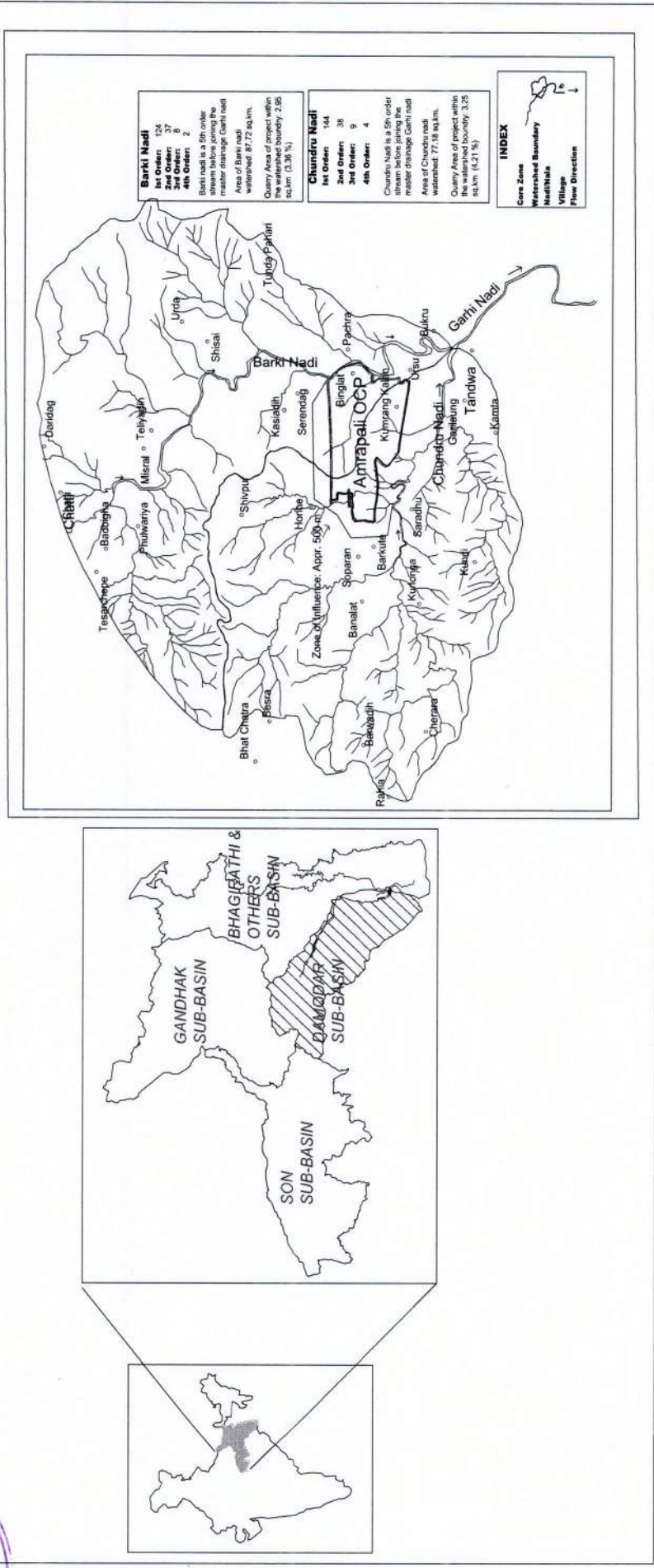
Area of Catchment (within Buffer Zone)	77.18 km ²	87.72 km ²
Project area falls in the Catchment Area	3.25 km ² (4.21%)	2.95 km ² (3.36%)



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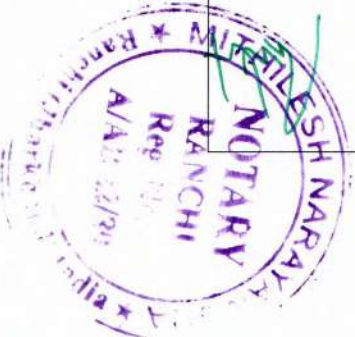
LOWER GANGA BASIN

WATERSHED MAP OF BARKI NADI & CHUNDRU NADI



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Chapter 3

Impact of Riverine Ecosystem

Chundru nadi and Barki river have been identified as the important streams controlling drainage of core and buffer zone of the project. Several industrial and community related activities that are being carried out in the watershed of these rivers will have a significant adverse impact on the riverine ecosystem. This impact can be quantitative and qualitative.

3.1 Impact of Mining Activity

The identified impacts of mining activity on the riverine ecosystem are as given below.

S.No	Particulars	Details
01	Quantitative Impact	<ul style="list-style-type: none"> Impact due to change in the Topography and drainage of the watershed due to mining activity
02	Qualitative Impact	<ul style="list-style-type: none"> Mine and workshop effluent Surface run off/ storm water run-off from the mine and industrial area

3.1.1 Quantitative Impact

Impact Due to Change in Topography and Drainage

Mining of coal by open cast method causes changes in topography. The change of ground relief in a mine area influences the local drainage. This may alter the drainage at the micro level.

Important drainage controlling the project area and its buffer zone is Garhi nadi and its two major tributaries Barki nadi and Chundru nadi. Plan showing the surface water features and their respective distances from the Amrapali OCP is given below.





Fig: Existing State of Surface water features and their respective distances from the Amrapali OCP

From the above fig., it is understood that the major drainages are at a safe distance from the present working.

The eastern surface boundary of the proposed project has been fixed leaving a surface barrier of 60m from Barki River, flowing from north to south and carries the run-off to the master drainage Garhi Nadi flowing towards south. The western surface boundary has been fixed leaving a surface barrier of 60m from Bahut Chuha nala, which is the tributary of easterly flowing Chundru nadi.

Binglat/ Dudhmatia Stream flowing easterly within the core zone of the project finally meets Barki River. In addition to this, few 1st order seasonal streams of these tributaries originate within the mine area.

The rainfall of the region majorly varies between 1000 mm/year to 1400 mm/year. However, it is observed that the average maximum rainfall of 84% is obtained only during the monsoon season. Therefore, during the non-monsoon season, both Barki and Chundru rivers are generally dry. The photographs showing flow of Barki River and Chundru River are as given below.



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Fig: Photograph showing Flow pattern of Barki River



Fig: Photograph showing Flow pattern of Chundru River



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With the progress in mining activity, the catchment area in the upstream region of these streams will be disturbed. Mainly Bingalt/ Dudhmatia stream is proposed to be diverted all along the northern boundary of the project.

Further, due to the proposed mining activity, change in the land use and topography of the area is subject to occur. The following plans show the change the watershed boundary of Barki and Chundru rivers.

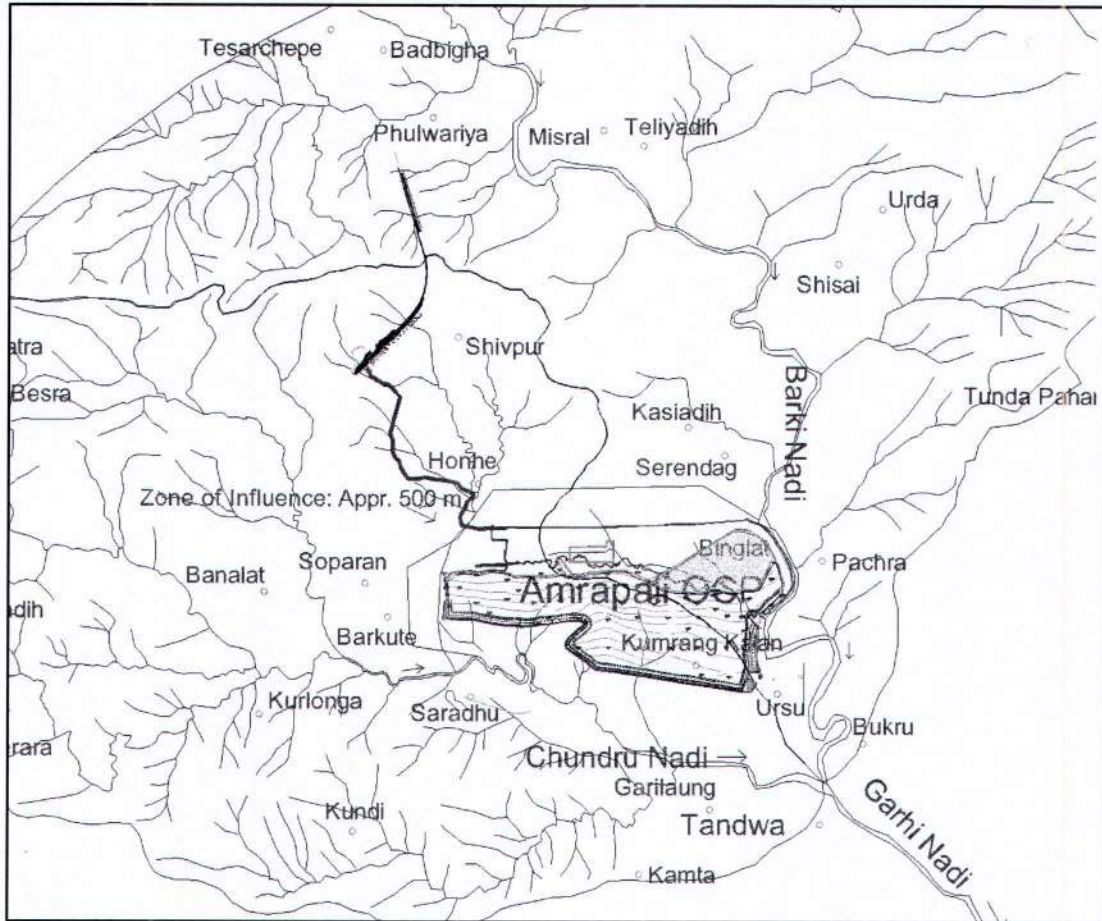


Fig: Plan showing the Present Scenario of Drainage Pattern



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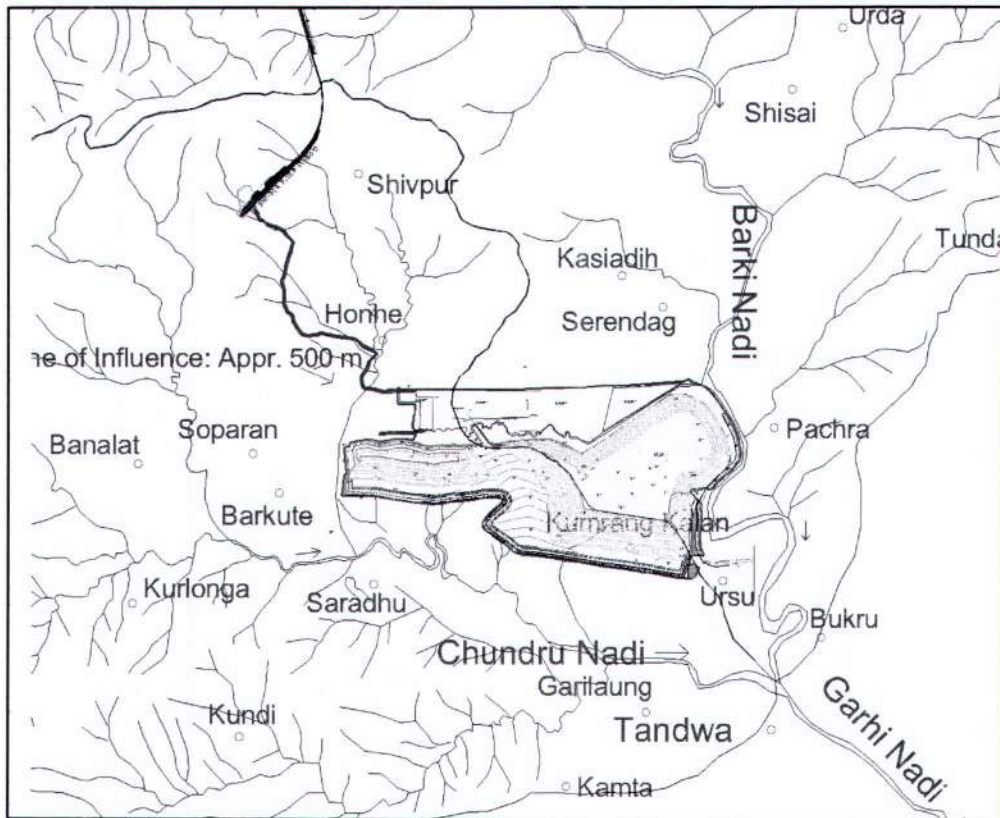


Fig: Predicted change in the Drainage Pattern Due to mining Activity

Particulars	Chundru nadi	Barki nadi
Area of Catchment (within Buffer Zone)	77.18 km ²	87.72 km ²
Project area falls in the Catchment Area	3.25 km ² (4.21%)	2.95 km ² (3.36%)
Loss in Catchment area due to mining proposed mining activity	3.25 km ² (4.21%)	1.85 km ² (2.10%)
Avg. loss in the quantity of water in the main drainage due to change in land use	2.41 Mm ³ /yr	1.37 Mm ³ /yr

Avg. loss in the quantity of water in the main drainage due to change in land use has been estimated as 3.78 Mm³/yr, and 84% of this quantity is received in monsoon season. In the monsoon season, water will be collected in the mine sump arising as a result of this disturbance. This water is pumped out into the downstream of the respective nalas mainly during monsoon season i.e. outside the mining property where the original course of these nalas will be maintained.

Pre-mining elevation of topography varies from 497 m and 440 m above MSL. The HFL of Barki nadi as recorded in the vicinity of the project is 455.0 m above MSL (As on 17.09.1976) (adjacent surface RL along the HFL line is- 456m to 471m). So, there is no problem of surface water inrush into the mine. Rainwater, which falls on the mining area and groundwater which



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seeps into the mine are also pumped out in the drainage system after treatment (through sedimentation) to maintain the e-flow (environmental flow). Hence, there is no impact on drainage quantitatively.

Binglat Stream Diversion Study

After study of the topographical & contour map, mining & geological condition and other technical and mining parameters, the nallah is proposed to be diverted from the north of Binglat OB dump as shown in the plan below. Length of diverted nala is around 1500 m.

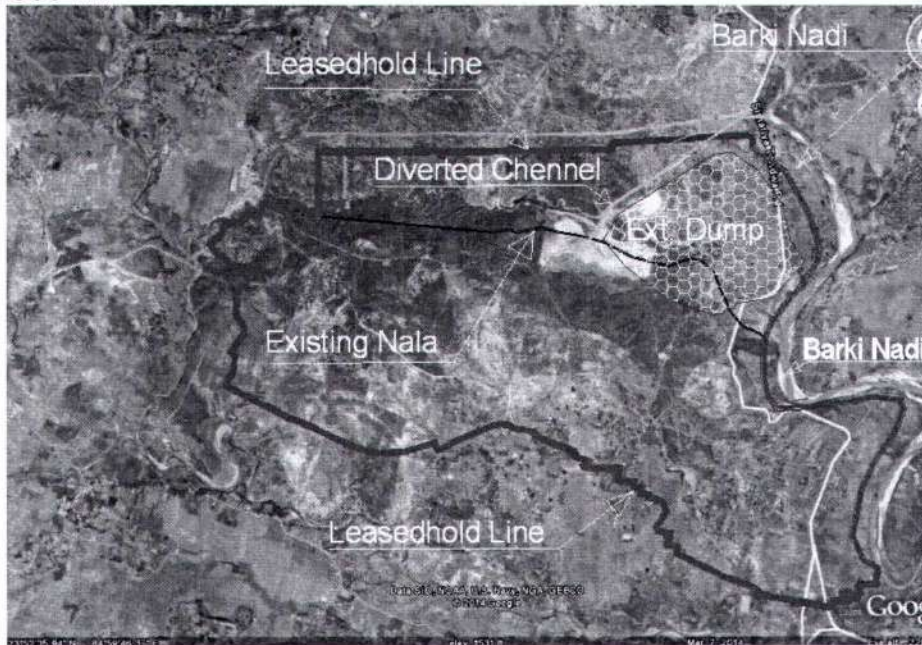
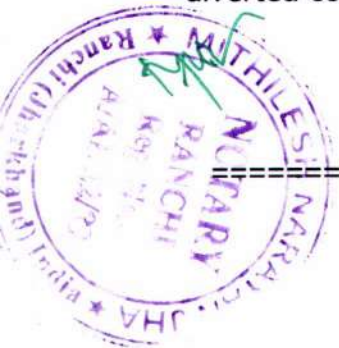


Fig: Proposed Alignment of Diverted Channel

S.No	Particulars	Details
01	Length of Diverted nala	1.5 km
02	Bed R.L.	+460.50 m to 457.50 m
03	Longitudinal Slope	0.002
04	Velocity	2.56 m/sec

Cross Sectional Profile of the Diverted Channel

Following drawing shows the general profile of channel at different section of along the diverted course of alignment.



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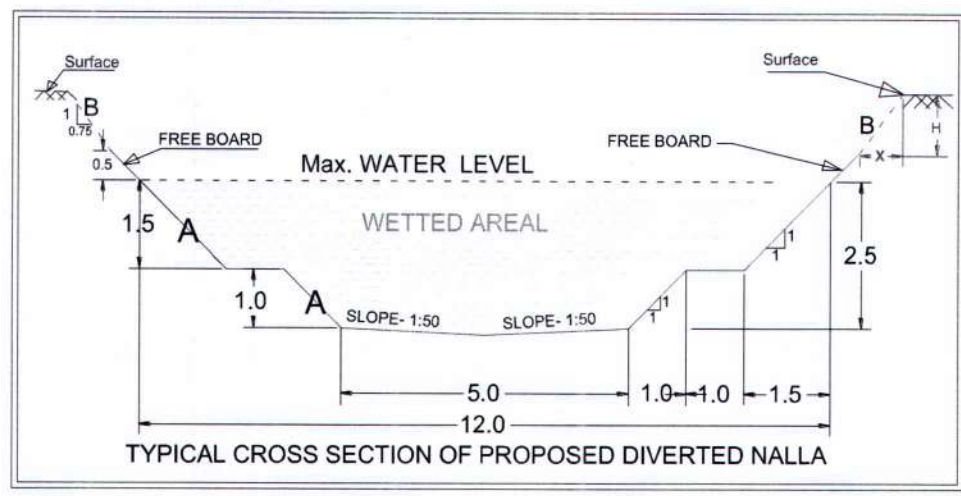


Fig: Typical C/S of the Channel

Particulars	Details
Bed Width	5 m
Side Slope	1:1
Top Width	12 m
Overall Slope	0.002
Wetted Perimeter	14.6 m
Mean Hydraulic Depth	1.5 m

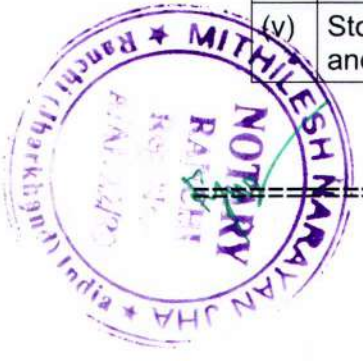
The application for permission of diversion of Dudhmatia Nallah has also been submitted to EE (Irrigation Dept.) on 04.02.2021.

3.1.2 Qualitative Impact

Likely sources of pollution from this project along with the type of pollutants are as follows:

Sources of Water pollution

(i)	Mine Discharge	Suspended solids of coal and clay.
(ii)	Workshop Effluent	Suspended solids and Oil & Grease.
(iii)	Domestic waste water	BOD and TSS.
(iv)	Surface run-off passing through coal stockpiles,	Suspended solids.
(v)	Storm water from leasehold area and built-up area	Suspended solids.



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A. Mine discharge and Workshop Effluent

Mine discharge is the seepage water from the coal face and rainfall collected in the mine void. It is estimated that, from the proposed mining activity, around 2332 m³/day of water will be accumulated in the mine sump.

Mine discharge mainly contains suspended particles of coal and clay, which can be removed by providing sufficient settling time in the mine sump.

It is proposed to re-use this water for industrial and domestic needs of the project. Any small quantity remaining after fulfilling project needs, will be stored in the mine sump for artificial ground water recharge.

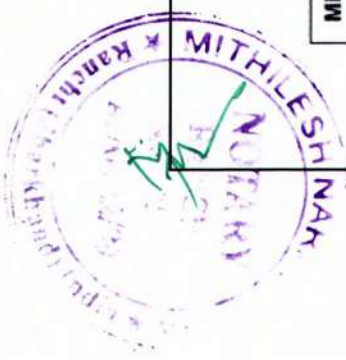
1. Workshop discharge → O&G Trap → Settling tank → Reuse
2. Mine Discharge → Mine Sumps for TSS removal → Reuse
3. Domestic effluent → Sewage Treatment Plant.

Workshop effluent is generated during the process of HEMM and floor washing. This effluent mainly contains TSS, oil and grease as main contaminants. The estimated water consumption of Workshop for the proposed activity would be 126 m³/day. The effluent from the workshop is treated at the effluent treatment plan containing oil and grease trap and settling pond. The treated effluent is recycled and reused.

Thus, both Mine discharge and workshop effluent are treated in a closed circuit system, leading to no direct impact on the riverine ecosystem.

The detailed water balance is given in the figure below.

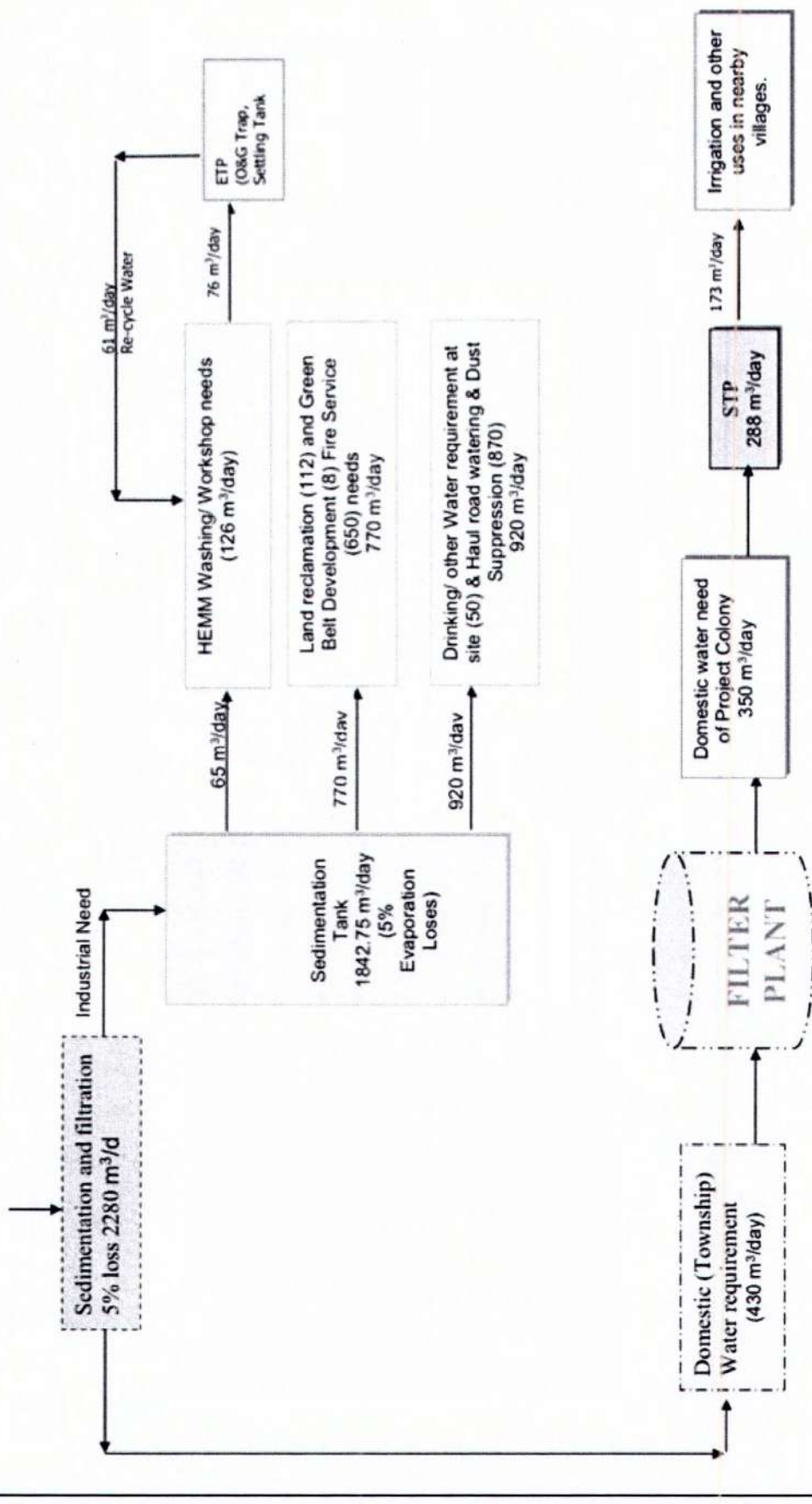




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PLATE XII: PROPOSED WATER USAGE DIAGRAM OF AMRAPALI EXPANSION OCP, MAGADH-AMRAPALI AREA, NKCF, CCL

MINE DISCHARGE & ACCUMULATED RAINWATER AT MINE SUMP
(2.332 m³/dav)

(All Values are in m³ / day)



Effluent water quality of mine water and workshop effluent have been studied and the results are as given below.

workshop discharge.

Table 3.1 Effluent Water Quality

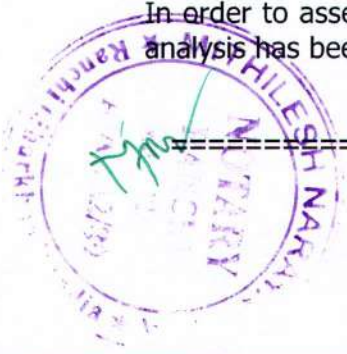
Period: Pre-Monsoon 2020

Parameters	Mine Sump Effluent	Workshop Effluent	Environmental Protection Act. 1986 (Schedule VI) - Inland surface water
	3/26/2020		
Ammonical Nitrogen,	0.6	1.52	50
Arsenic (as As), mg/l, Max	<0.002	<0.002	0.2
B.O.D (3 days 27°C),	<2.00	<2.00	30
Cadmium(as Cd), mg/l, Max	<0.0005	<0.0005	2
COD, mg/l, Max	40	96	250
Copper (as Cu), mg/l, Max	<0.03	<0.03	3
Dissolved Phosphate,	<0.30	<0.30	5
Fluoride (as F) mg/l, Max	1.78	1.72	2
Free Ammonia, mg/l, Max	<0.02	<0.02	
Hexavalent Chromium,	<0.01	<0.01	0.1
Iron (as Fe), mg/l, Max	<0.06	<0.06	3
Lead (as Pb), mg/l, Max	<0.005	<0.005	0.1
Manganese(as Mn), mg/l, Max	0.09	0.13	2
Nickel (as Ni), mg/l, Max	<0.01	0.01	3
Nitrate Nitrogen, mg/l, Max	3.74	3.46	10
Oil & Grease, mg/l, Max	<2.00	5.00	10
pH value	6.58	6.69	5.5 to 6.5
Phenolic compounds	<0.001	<0.001	1
Selenium (as Se), mg/l, Max	<0.002	<0.002	0.05
Sulphide (as SO ₃), mg/l, Max	<0.005	<0.005	2
Temperature (°C)	28.6	28.5	Shall not exceed 5oC above the receiving water temperature
Total Chromium (as Cr),	<0.04	<0.04	2
Total Kjeldahl Nitrogen,	<1.00	<1.00	100
Total Residual Chlorine	<0.02	<0.02	1
TSS	20	45	100
Zinc (as Zn), mg/l, Max	0.01	<0.01	5

All the water quality parameters in the effluent water are well within the prescribed limits suggesting that the existing mine water sumps are being properly maintained and efficient enough.

In order to assess the impact of proposed working on the surface water quality, water quality analysis has been carried out at four points. The details are as given under.

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Table 3.2 Surface Water Monitoring Stations

S.No	Source	Location
1	Surface Water	1 Barki River U/S of Amrapali OCP
		2- Dudhmatia Nala Before Conf. into barki River
		3. Honhe Nala D/s of Amrapali OCP
		4. Barki River D/s of Amp. OCP After conf. with Chundru Nadi

Results

Surface water quality has been measured at 4 locations in the pre monsoon period and the results are as given below.

Table 3.3 Surface water Quality

Period: Pre-Monsoon 2020

Surface	Barki River U/S of Amrapali OCP			Dudhmatia Nala before Confluence to Barki River			Honhe Nala D/S of Amrapali OCP			Barki River After Confluence into Chundru nadi		
	3/26	4/19	5/14	3/26	4/19	5/14	3/26	4/19	5/14	3/26	4/19	5/14
Arsenic (as As), mg/l, Max	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
BOD	<2.00	<2.00	2	<2.00	<2.00	2	2	2	2.2	2	2	2.2
COD (mg/l)	16	21	18	30	34	36	28	25	24	18	24	22
Cadmium(as Cd), mg/l, Max	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Chlorides (as Cl), mg/l, Max	10	8	14	20	22	28	72	56	74	38	32	42
Copper (as Cu), mg/l, Max	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Disolved Oxygen, min.	5	6	5.8	5.6	5.8	5.8	5.4	5.6	5.6	5.4	5.6	5.6
Fluoride (as F) mg/l, Max	0.98	0.76	0.88	1.53	1.18	1.28	1.02	0.96	0.94	1.6	1.36	1.28
Hexavalent Chromium,	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Iron (as Fe), mg/l, Max	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06
Lead (as Pb), mg/l, Max	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Nitrate (as NO ₃), mg/l, Max	4.54	3.36	6.28	14.22	10.6	10.66	9.38	7.66	10.56	14.46	11.32	16.37
pH value	7.92	7.89	7.84	6.64	6.84	7.06	7.91	7.96	7.79	7.67	7.75	7.55
Phenolic compounds	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Selenium (as Se), mg/l, Max	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Sulphate (as SO ₄) mg/l, Max	14	12	32	157	138	134	40	38	56	152	138	112
TDS	198	172	222	386	324	334	376	304	328	364	296	344
TSS	16	14	28	48	36	26	20	22	32	22	24	28
Zinc (as Zn),	<0.01	<0.01	0.11	0.02	<0.01	0.14	<0.01	<0.01	0.01	<0.01	<0.01	0.12

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mg/l, Max					1			1		1		
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From the surface water quality, it can be observed that all the water quality parameters are within the permissible levels.

B. Surface Run-Off/ Storm Water Run-Off from the Mine and Industrial Area

Surface run-off from the mine and industrial area generally contain suspended particles of coal, silt, and occasionally oil and greese. When this surface run-off directly enters the natural drainage, it can have several adverse impacts like increased silt load on river bed, depleting the water quality etc.

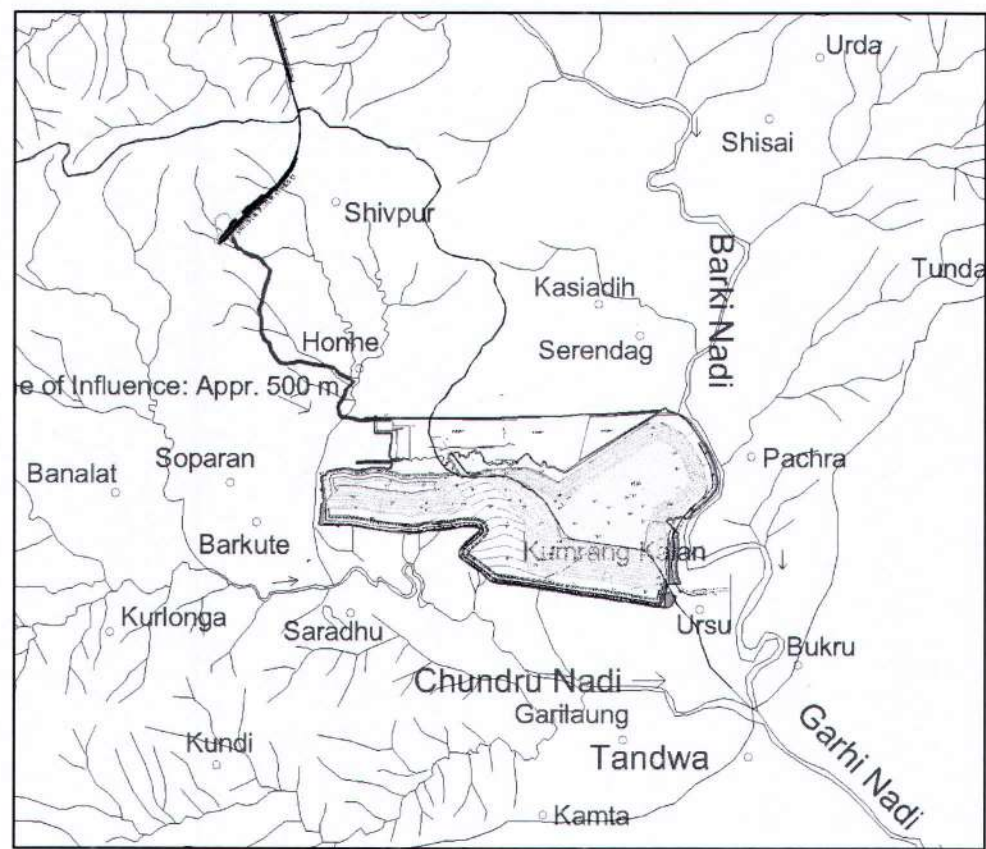
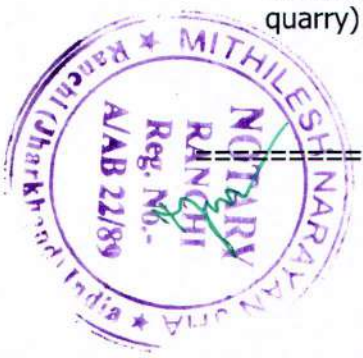


Fig: Plan Showing Predicted Drainage Pattern Due to Mining

The above figure depicts all mining and allied activities on the projected watershed plan. As discussed in the above sections, project falls in the watershed of both Chundru river and Barki river.

Based on the study carried out on the impact of surface run-off on the drainage system, following observations can be derived.

- Honhe stream and Binglat stream are impacted by the surface run-off from the project, which finally confluence into Chundru and Barki river respectively.
- Shivpur Siding, Coal transportation road and Honhe Dump (OB dump in the western quarry) contribute to the surface run-off of Honhe nala.



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- Similarly, Binglat Dump (External Dump+ OB dump in the eastern quarry), workshop and NBCC road are the sources contributing to the surface run-off of Binglat Nala.

3.2 Impact of Non-Mining Sources

The Riparian ecosystem of Barki and Chundru rivers may also have an impact due to increase in the human settlements in the catchment region. The recent industrial growth (various mining and thermal power projects) in the region has led to significant rise in the human settlements, preferably on the banks of rivers, as they serve as a source of potable water for various domestic uses. The increased population load coupled with the infrastructure development has considerable impact on the riverine ecosystem.

The identified impact (quantitative as well as qualitative) of non-mining activity on the rivers may be categorized as follows:

- Impact due to increased settlement in the catchment area. Domestic Sewage discharge, Dhobi Ghats, Garrages and Cattle Wallowing.
- Brick Klins damaging river banks and water quality



Fig- Thematic map representing major human settlements in the Barki-Chundru River System



Impact on Honhe Nala

Honhe Nala is a tributary stream of Chundru River. It flows in the north to south direction along the western boundary of the project and finally meet the Chundru River. Honhe Nala is approximately 3.5 km in length and mostly flows through an untouched course.

The catchment of Honhe Nala mostly comprises mostly of hilly terrain, causing significant surface runoff during rainfall season. The inhabitants of adjoining Honhe Village seldom utilize the stream water for domestic chores and cattle wallowing.



Impact on Barki River

During monsoon, the river flows to its capacity. However, the flow reduces significantly during non-monsoon seasons leaving behind a thin river stream and sandy river beds.

Multiple dhobi ghats, vehicle washing and cattle wallowing can be observed along the banks of Barki River. The river serves as a major source of water for domestic chores of residents of Pachra, Binglat and Ursu villages. As a recent development, multiple brick kilns can be observed on the left bank of Barki River near S-E corner of project boundary. The brick kilns are causing erosion of the river banks thus affecting the flow of the river. This severely hampers the quality of river water.



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A time series assessment (2016 and 2021) of Barki River Bank has been carried out. Through the assessment, significant change in the land-use of the river banks has been visualized. It has been observed that agricultural land along the river bank has been converted into numerous brick kilns encroaching the river bank, thus altering the land use and causing considerable quantitative and qualitative impact.



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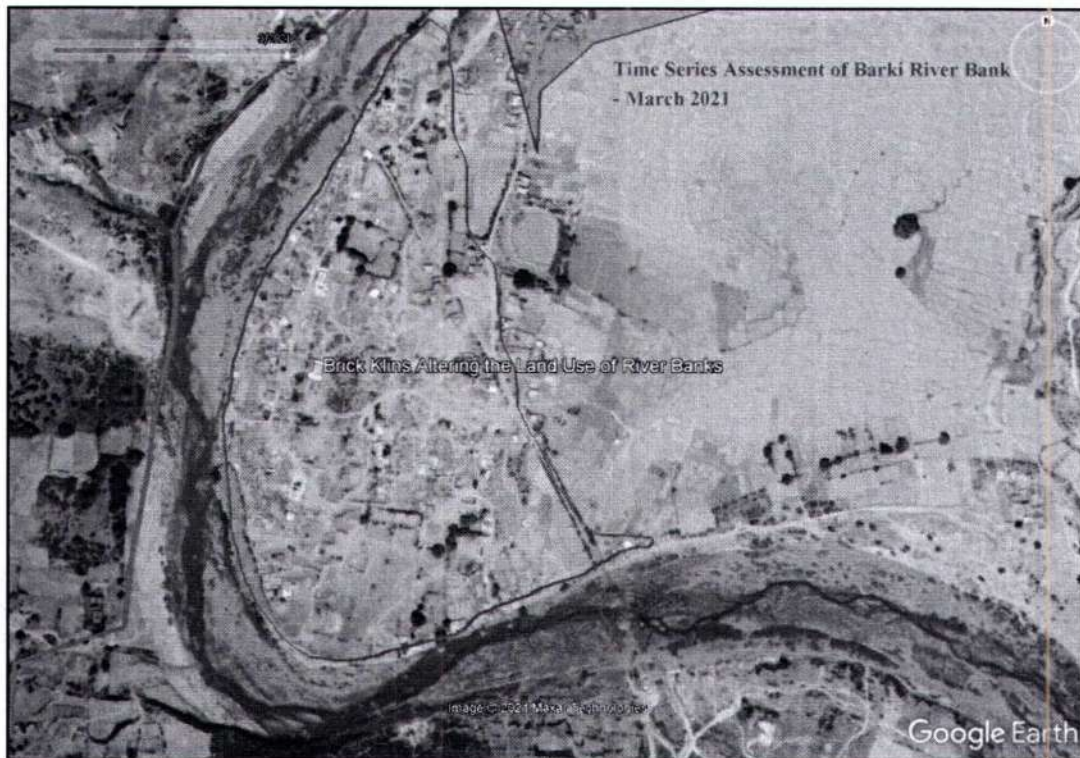
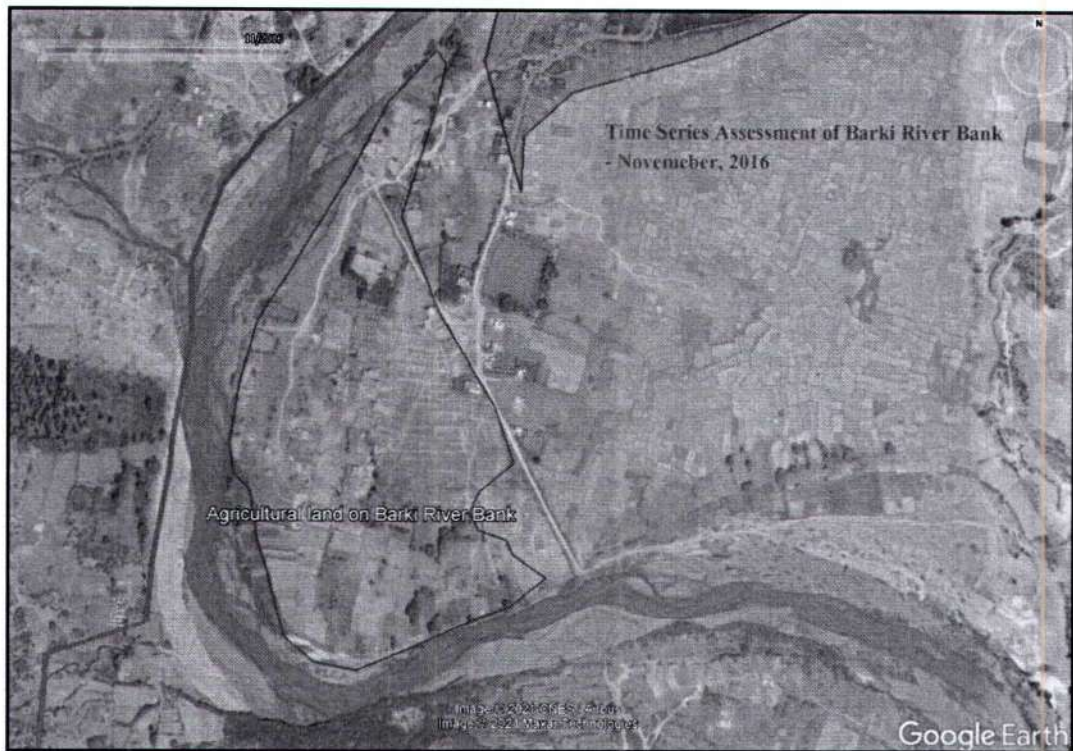


Fig: Time Series Assessment of Banks of Barki River

Impact on Chundru River



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Magadh-Amrapali Area, Central Coalfields Limited**

Chundru River flows eastwards at a distance of approximately 900 m from the Amrapali Project in the South direction. Chundru meets Barki River to form Garhi River, which later meets Damodar River in the south at a distance of around 16 km from the point of confluence.

Like Barki River, Chundru River carries significant silt load in its flow. Honhe Nala is a major tributary of the river. Major human settlements along the Chundru River bank include Tandwa Village, NTPC Tandwa, Koyad Village and Saradhu Village.

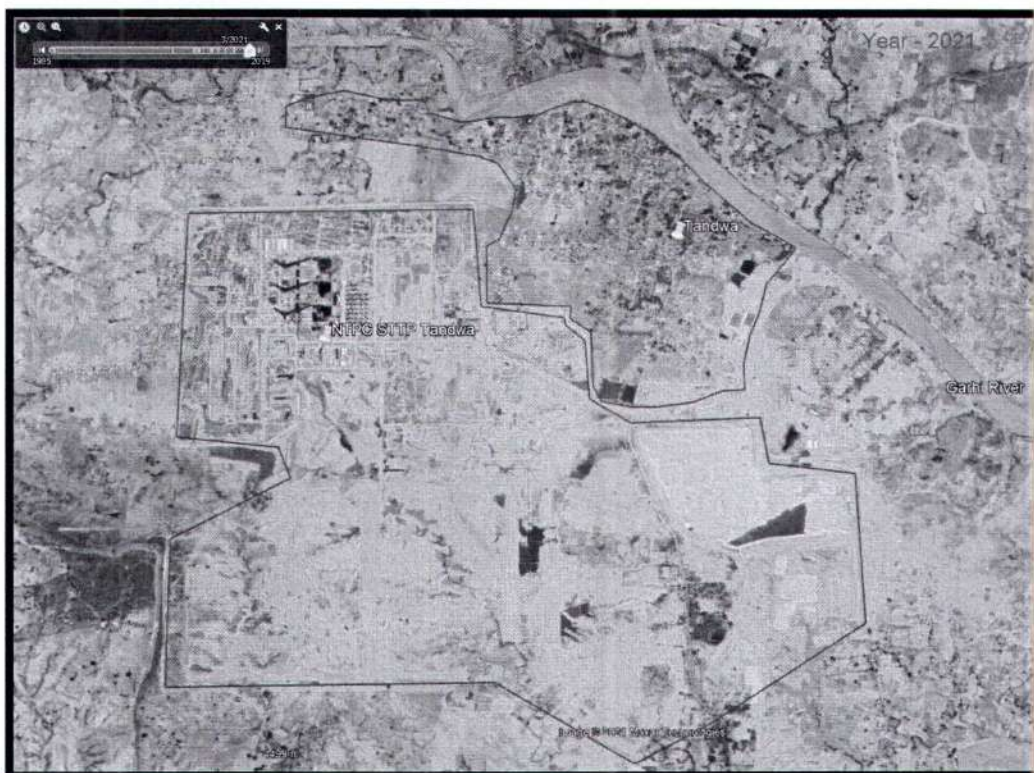
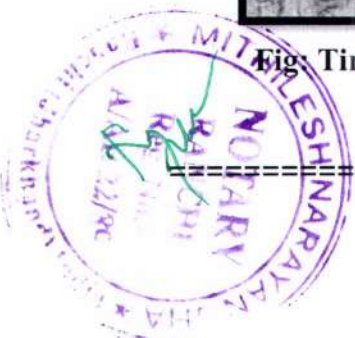


Fig. Time Series Assessment of Settlement on the Banks of Chundru River



**Riverine Ecosystem Conservation and Management Plan of Amrapali Expansion OCP (Phase-I)
Magadh-Amrapali Area, Central Coalfields Limited**

As Tandwa village is the largest human settlement on the banks of Chundru River, a time series assessment (2014 and 2021) of Tandwa and nearby settlement has been carried out. Through the assessment, it has been observed that the density of settlements has considerably increased in Tandwa and nearby areas on Chundru River Bank in the given time span. The region is undergoing development at a rapid pace. Setting up of big industrial units like NTPC STTP Tandwa may also be observed. The rapid commercialization and infrastructural growth of the region is certainly leading to the development of Tandwa. However, at the same time, significant increase in the population load may have a considerable impact on Chundru River.



Prepared by CMPDI, RI-III, Ranchi

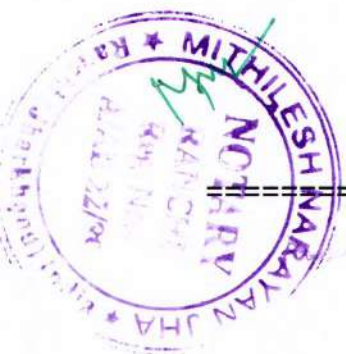
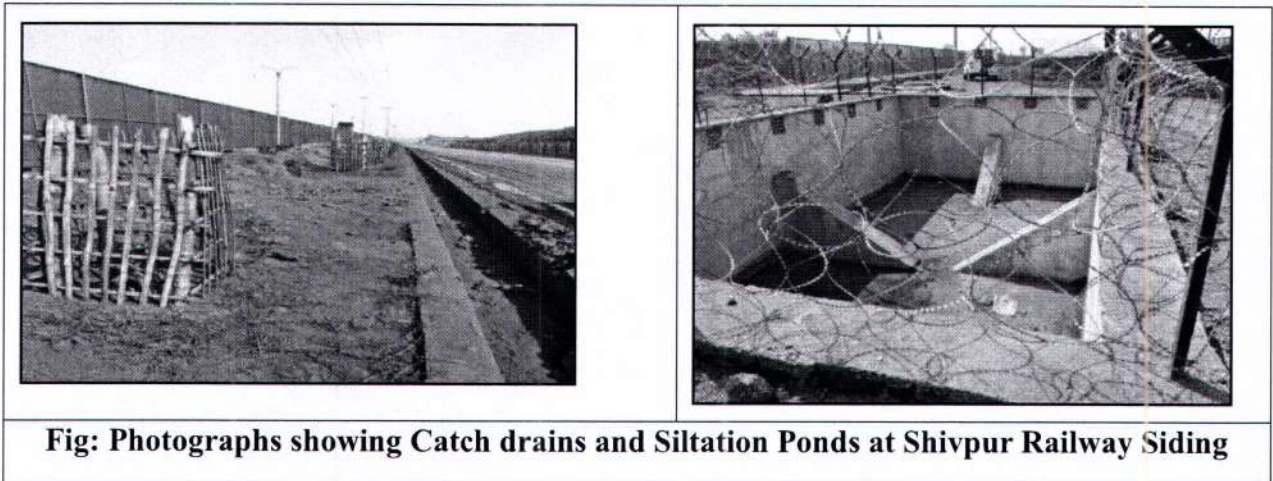
Chapter 4

Riverine Conservation and Management Plan

4.1 Existing Control Measures

- Mine Sumps have been provided for collection and treatment of Mine Seepage water.
- Workshop effluent is being treated at ETP consisting of Oil and greese trap and Sequential Settling ponds.
- Around 5.5 km of Toe wall, catch drain along with sequential settling ponds have been provided all around external OB dumps to treat surface run-off and prevent soil erosion.
- Rain water harvesting system has been provided on different office buildings of Amrapali OCP.
- One no. check dam at Dhudhmatia nallah near Binglat OB dump has been constructed for the ground water recharge and to prevent the siltation.
- 4 no. of ponds were constructed in villages Hone, Ursu, Koed and Tileadih.
- Catch drains and settling ponds have been provided at Shivpur Railway siding to treat surface run-off from siding.
- OB Dump slopes are being covered with grass mats (namely Guinea grass, Charabadam and Johnson grass) in order to prevent erosion of soil.

Photographs showing the water conservation measures are as given below.



**Riverine Ecosystem Conservation and Management Plan of Amrapali Expansion OCP (Phase-I)
Magadh-Amrapali Area, Central Coalfields Limited**



Photographs showing Seed Ball & Grassing on Honhe and Binglat Dump



Photographs showing Toe wall and garland Drain



4.2. Proposed Water Conservation Measures

Activity	Details	Cost (in Rs. Lakhs)	Timeline
Water Pollution Control & Conservation Measures	Construction of additional Check dams	350	Tender Floated. Work Order to be Issued. Tentative date of Completion: April 2021
	Sewage Treatment Plant at proposed colony	200	Construction work of colony has been started by NBCC. Tentative date of Completion: March 2023
	Embankment along Barki River	500	Mar-2023
	Additional Rain Water Harvesting System	45	Scheme under preparation December 2021
	Diversion of Dudhmatia stream	164.36	Approval awaited from GoJ May 2021

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Riverine Ecosystem Conservation and Management Plan of Amrapali Expansion OCP (Phase-I)
Magadh-Amrapali Area, Central Coalfields Limited

~~141-~~

Activity	Details	Cost (in Rs. Lakhs)	Timeline
Additional Garland Drain	In between the OB dump and diverted stream of Length 500m	10	Scheme under preparation May 2021
Stablstaion of slope along dushmatiya Nallah using Jute netting & making of Guard wall with drains along stream of Length 1500 m and Height 3 m	1.5 km length & avg height of 8 meter along dushmatiya nallah slope	110	Scheme under preparation Oct-2021



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Prepared by CMPDI, RI-III, Ranchi

Chapter 5

Concluding Remarks

- From the present study, it is concluded that there is no water drawl from the surface water regime around the mining area. Thus, there is no direct impact on the supportive carrying capacity of the riverine system.
- The likely sources of pollution of the riverine ecosystem from Amrapali OCP are surface run-off from mine, workshop effluent, and mine water from the mine.
- Adequate water pollution control measures have been taken to prevent pollution from the mine. Thus, the assimilative potential of the riverine ecosystem is not getting affected.
- The excess mine water discharge from the mines is discharged into surface water regime which helps in rejuvenation of the riverine ecosystem.
- Some encroachment on the river has been observed mainly brick kilns and human settlement along the banks of the river, and this is a source of water pollution and degradation of river bank. In order to protect the riverine system, all the human activities along the banks of river need to be constrained / diverted away from the river.
- For further upgradation of riverine ecosystem, plantation on embankments and riverfront development have been proposed.
- Periodic Monitoring of riverine ecosystem at 7 locations have been proposed for determining the quality of the surface water and if required, additional protection measures will be undertaken by the CCL.



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Annexure:- 14



No. CC/Tech/Star Rating/2022-23
GOVERNMENT OF INDIA
MINISTRY OF COAL
COAL CONTROLLER'S ORGANISATION

5th floor, Core-2,
Scope Minar, Laxmi Nagar,
Delhi — 110092.

Dated. the 20th March, 2024.

To
Sri Hitlar Singh,
Under Secretary (CCSD),
Ministry of Coal, Shastri Bhawan
New Delhi - 110001

Subject: - Result of Star Rating of all coal/lignite mines for the performance base year 2022-23.

I am directed to inform you that the assessment of star Rating of coal/lignite mines based on the performance of 2022-23 has been reviewed by competent authority.

Mine wise % of final marks and Star Rating awarded, has been given in Annexure-A for Underground mines (150 mines), Annexure-B for Opencast mines (216 mines) and Annexure-C for Mixed mines (14 mines).

This issues with the approval of Coal Controller.

Enclosure: As above.

Aarti
20/3/24
(Aarti Mahawar)

Deputy Director

Copy to:

1. Advisor (Project), MoC, Shastri Bhawan, New Delhi - 110001.
2. Star Rating Section, CCO.



Annexure-A

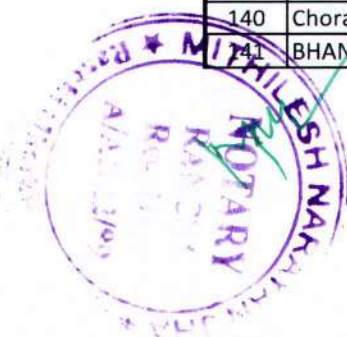
Star Rating of Under Ground mines for the performance base year 2022-23						
Sr. No.	Name of Mine	Type of Mine	Subsidiary/ Company	Financial Year	Final marks (%) awarded by CCO	Star Rating
1	ORIENT MINE NO. 1&2	UG	MCL	2022-2023	95	5 Star
2	HALDIBARI U/G MINE	UG	SECL	2022-2023	95	5 Star
3	HIRAKHAND BUNDIA MINE	UG	MCL	2022-2023	95	5 Star
4	BHATGAON COLLIERY	UG	SECL	2022-2023	94	5 Star
5	Chhatarpur I Mine	UG	WCL	2022-2023	93	5 Star
6	Moonidih	UG	BCCL	2022-2023	93	5 Star
7	Jamadoba Colliery	UG	TSL	2022-2023	93	5 Star
8	Khairaha Ug mine	UG	SECL	2022-2023	92	5 Star
9	JHANJRA PROJECT COLLIERY	UG	ECL	2022-2023	92	5 Star
10	Sijua Colliery	UG	TSL	2022-2023	91	5 Star
11	SAONER MINE III	UG	WCL	2022-2023	90	4 Star
12	RAVINDRAKHANI-6 INCLINE	UG	SCCL	2022-2023	90	4 Star
13	TAWA II	UG	WCL	2022-2023	89	4 Star
14	Tandsi Mine	UG	WCL	2022-2023	89	4 Star
15	Bicharpur Coal Mine	UG	UTCL	2022-2023	89	4 Star
16	Ncph colliery R6 Mne	UG	SECL	2022-2023	89	4 Star
17	NANDIRA COLLIERY	UG	MCL	2022-2023	89	4 Star
18	Vindhya UG Mine	UG	SECL	2022-2023	88	4 Star
19	Silewara Colliery	UG	WCL	2022-2023	88	4 Star
20	shyamsundarpur	UG	ECL	2022-2023	88	4 Star
21	RAVINDRAKHANI-7 INCLINE	UG	SCCL	2022-2023	88	4 Star
22	RAJUR INCLINE COLLIERY	UG	WCL	2022-2023	88	4 Star
23	Dhori Khas Colliery	UG	CCL	2022-2023	88	4 Star
24	Ballarpur Underground mine	UG	WCL	2022-2023	87	4 Star
25	SAONER MINE NO 1	UG	WCL	2022-2023	86	4 Star
26	Durgapur Rayatwari Colliery	UG	WCL	2022-2023	86	4 Star
27	Bagdewa Underground Mine	UG	SECL	2022-2023	85	4 Star
28	RAVINDRAKHANI-NT MINE	UG	SCCL	2022-2023	85	4 Star
29	Bhelatand Amalgamated Colliery	UG	TSL	2022-2023	85	4 Star
30	KALYANIKHANI-5 INCLINE	UG	SCCL	2022-2023	85	4 Star
31	VIJAY WEST UG MINE	UG	SECL	2022-2023	84	4 Star
32	SREERAMPUR-3 & 3A INCLINE	UG	SCCL	2022-2023	84	4 Star
33	Balrampur 10&12 Inclines	UG	SECL	2022-2023	84	4 Star
34	Bangwar Underground Mine	UG	SECL	2022-2023	84	4 Star
35	PATANSAONGI MINE	UG	WCL	2022-2023	84	4 Star
36	CHHATARPUR MINE NO. II	UG	WCL	2022-2023	84	4 Star
37	DAMNI UG MINE	UG	SECL	2022-2023	84	4 Star
38	Kunustoria Colliery	UG	ECL	2022-2023	84	4 Star
39	INDARAMKHANI-1A INCLINE	UG	SCCL	2022-2023	84	4 Star
40	Srirampur No.1 Incline	UG	SCCL	2022-2023	83	4 Star
41	SHANTHIKHANI MINE	UG	SCCL	2022-2023	83	4 Star
42	BAHERABADH	UG	SECL	2022-2023	83	4 Star
43	SAONER MINE NO.2	UG	WCL	2022-2023	83	4 Star
44	ADRIYALA SHAFT PROJECT(ALP)	UG	SCCL	2022-2023	82	4 Star
45	SIAL GHOGHRI COAL MINE	UG	RCCPL	2022-2023	82	4 Star
46	NOWROZABAD WEST COLLIERY	UG	SECL	2022-2023	82	4 Star



Star Rating of Under Ground mines for the performance base year 2022-23						
Sr. No.	Name of Mine	Type of Mine	Subsidiary/ Company	Financial Year	Final marks (%) awarded by CCO	Star Rating
47	Mathani UG Mine	UG	WCL	2022-2023	82	4 Star
48	Mahadeopuri	UG	WCL	2022-2023	82	4 Star
49	GODAVARIKHANI-11 INCLINE	UG	SCCL	2022-2023	82	4 Star
50	GODAVARIKHANI-2&2A INC	UG	SCCL	2022-2023	82	4 Star
51	WEST JKD	UG	SECL	2022-2023	81	4 Star
52	SHIWANI UNDERGROUND MINE	UG	SECL	2022-2023	81	4 Star
53	NEHERIYA	UG	WCL	2022-2023	81	4 Star
54	JHILIMILI	UG	SECL	2022-2023	81	4 Star
55	VISHNUPURI UG MINE-II	UG	WCL	2022-2023	80	3 Star
56	AMRITNAGAR COLLIERY	UG	ECL	2022-2023	80	3 Star
57	Satgram Project	UG	ECL	2022-2023	80	3 Star
58	GODAVARIKHANI-1 & 3 INC	UG	SCCL	2022-2023	80	3 Star
59	PARASEA COLLIERY	UG	ECL	2022-2023	79	3 Star
60	Nandgaon Incline	UG	WCL	2022-2023	79	3 Star
61	KHOTTADIH COLLIERY	UG	ECL	2022-2023	79	3 Star
62	Gayatri Underground Coal Mine	UG	SECL	2022-2023	79	3 Star
63	Khandra Colliery	UG	ECL	2022-2023	79	3 Star
64	Kapildhara UG Mine	UG	SECL	2022-2023	79	3 Star
65	UMARIA COLLIERY	UG	SECL	2022-2023	78	3 Star
66	RAVINDRAKHANI-5 INCLINE	UG	SCCL	2022-2023	78	3 Star
67	Piparia	UG	SECL	2022-2023	78	3 Star
68	Parbelia Colliery	UG	ECL	2022-2023	78	3 Star
69	PANDAVESWAR COLLIERY	UG	ECL	2022-2023	78	3 Star
70	BALGI COLLIERY	UG	SECL	2022-2023	77	3 Star
71	Khas Kajora Colliery	UG	ECL	2022-2023	77	3 Star
72	kalidaspur project	UG	ECL	2022-2023	77	3 Star
73	PURE SEARSOLE COLLIERY	UG	ECL	2022-2023	76	3 Star
74	Kurja Underground Mine	UG	SECL	2022-2023	76	3 Star
75	Kumda 7&8 Inclines	UG	SECL	2022-2023	76	3 Star
76	KUMARDIHI A COLLIERY	UG	ECL	2022-2023	76	3 Star
77	KAKATIYA KHANI NO-6 INCLINE	UG	SCCL	2022-2023	76	3 Star
78	JOGIDIH COLLIERY	UG	BCCL	2022-2023	76	3 Star
79	BARTUNGA HILL MINE	UG	SECL	2022-2023	75	3 Star
80	Patmohana	UG	ECL	2022-2023	75	3 Star
81	LAKHIMATA COLLIERY	UG	ECL	2022-2023	75	3 Star
82	J. K. NAGAR (R) COLLIERY	UG	ECL	2022-2023	75	3 Star
83	Nawapara UG Mine	UG	SECL	2022-2023	74	3 Star
84	LOWER KENDA COLLIERY	UG	ECL	2022-2023	74	3 Star
85	KHARKHAREE COLLIERY	UG	BCCL	2022-2023	74	3 Star
86	Kasipet-2 Incline	UG	SCCL	2022-2023	74	3 Star
87	Rehar UG Mine	UG	SECL	2022-2023	73	3 Star
88	Churcha Mine RO	UG	SECL	2022-2023	73	3 Star
89	KHOODIA	UG	ECL	2022-2023	73	3 Star
90	GOVINDPUR PROJECT UG	UG	CCL	2022-2023	73	3 Star
91	Vakilpalli	UG	SCCL	2022-2023	72	3 Star
92	Tilaboni Colliery	UG	ECL	2022-2023	72	3 Star
93	BARTARAI UG MINE	UG	SECL	2022-2023	72	3 Star
94	Belbaid Colliery	UG	ECL	2022-2023	72	3 Star



Star Rating of Under Ground mines for the performance base year 2022-23						
Sr. No.	Name of Mine	Type of Mine	Subsidiary/ Company	Financial Year	Final marks (%) awarded by CCO	Star Rating
95	CHINAKURI MINE-III	UG	ECL	2022-2023	72	3 Star
96	Meera UG Mine	UG	SECL	2022-2023	72	3 Star
97	Kurasia UG	UG	SECL	2022-2023	72	3 Star
98	Hariajam	UG	ECL	2022-2023	72	3 Star
99	Tawa Mine	UG	WCL	2022-2023	71	3 Star
100	SHANKARPUR COLLIERY	UG	ECL	2022-2023	71	3 Star
101	Rani Atari	UG	SECL	2022-2023	71	3 Star
102	BEJDIH COLLIERY	UG	ECL	2022-2023	71	3 Star
103	PALI COLLIERY	UG	SECL	2022-2023	71	3 Star
104	Dhemomain Pit Colliery	UG	ECL	2022-2023	71	3 Star
105	SATGRAM INCLINE	UG	ECL	2022-2023	70	2 Star
106	Katkona UG	UG	SECL	2022-2023	70	2 Star
107	KAKATIYAKHANI NO.5 INCLINE	UG	SCCL	2022-2023	70	2 Star
108	Jamuna 9&10 Mine	UG	SECL	2022-2023	70	2 Star
109	PADMAVATHIKHANI-5 INCLINE	UG	SCCL	2022-2023	69	2 Star
110	Central Kajora Colliery	UG	ECL	2022-2023	69	2 Star
111	CHURI UG PROJECT	UG	CCL	2022-2023	69	2 Star
112	MAHESHPUR COLLIERY	UG	BCCL	2022-2023	69	2 Star
113	MADHABPUR COLLIERY	UG	ECL	2022-2023	69	2 Star
114	KASIPET -1	UG	SCCL	2022-2023	69	2 Star
115	KAKATIYAKHANI NO1 & 1A INCLINE	UG	SCCL	2022-2023	69	2 Star
116	BELGOAN COAL MINE	UG	SISCL	2022-2023	68	2 Star
117	Bankola Colliery	UG	ECL	2022-2023	67	2 Star
118	Porascole West Colliery	UG	ECL	2022-2023	67	2 Star
119	Chasnalla Colliery	UG	SAIL	2022-2023	67	2 Star
120	JAMBAD UG COLLIERY	UG	ECL	2022-2023	67	2 Star
121	SURAKACHHAR COLLIERY (MAIN MINE)	UG	SECL	2022-2023	66	2 Star
122	Mithani Colliery	UG	ECL	2022-2023	66	2 Star
123	Pandavpara	UG	SECL	2022-2023	65	2 Star
124	NINGHA COLLIERY	UG	ECL	2022-2023	65	2 Star
125	Dhelwadih UG Mine	UG	SECL	2022-2023	65	2 Star
126	SINGHALI UG MINE	UG	SECL	2022-2023	64	2 Star
127	Siduli Colliery	UG	ECL	2022-2023	64	2 Star
128	Bijuri	UG	SECL	2022-2023	63	2 Star
129	Manderboni South Samla (A) Colliery	UG	ECL	2022-2023	63	2 Star
130	MADHUSUDANPUR 7 PIT INCLINE COLLIERY	UG	ECL	2022-2023	63	2 Star
131	SURAKACHHAR 3&4 INCLINE	UG	SECL	2022-2023	62	2 Star
132	Rajgamar 4&5 Incline	UG	SECL	2022-2023	62	2 Star
133	RAJENDRA UNDERGROUND MINE	UG	SECL	2022-2023	62	2 Star
134	Kumardhubi Colliery	UG	ECL	2022-2023	62	2 Star
135	BHADRA 7&8 UG MINE	UG	SECL	2022-2023	61	2 Star
136	Chapuikhas Colliery	UG	ECL	2022-2023	61	2 Star
137	DUBESWARI COLLIERY	UG	ECL	2022-2023	61	2 Star
138	CL JAMBAD COLLIERY	UG	ECL	2022-2023	60	1 Star
139	DHEMOMAIN INCLINE COLLIERY	UG	ECL	2022-2023	58	1 Star
140	Chora 10 Pit Colliery	UG	ECL	2022-2023	56	1 Star
141	BHANORA WEST BLOCK COLLIERY	UG	ECL	2022-2023	55	1 Star



Star Rating of Under Ground mines for the performance base year 2022-23						
Sr. No.	Name of Mine	Type of Mine	Subsidiary/ Company	Financial Year	Final marks (%) awarded by CCO	Star Rating
142	chora 7&9 Pit	UG	ECL	2022-2023	55	1 Star
143	BAHULA COLLIERY	UG	ECL	2022-2023	54	1 Star
144	Rajnagar RO	UG	SECL	2022-2023	54	1 Star
145	PORASCOLE EAST COLLIERY	UG	ECL	2022-2023	51	1 Star
146	KEDLA UNDERGROUND PROJECT	UG	CCL	2022-2023	51	1 Star
147	Shyampur-B Colliery	UG	ECL	2022-2023	50	1 Star
148	NARSAMUDA COLLIERY	UG	ECL	2022-2023	49	1 Star
149	Jamuna 1&2 Mine	UG	SECL	2022-2023	48	1 Star
150	Jhiria u/g mine	UG	SECL	2022-2023	46	1 Star



Star Rating of Open Cast mines for the performance base year 2022-23

Sr. No.	Name of Mine	Type of Mine	Subsidiary/ Company	Financial Year	Final marks (%) awarded by CCO	Star Rating
1	KRISHNASHILA	OC	NCL	2022-2023	99	5 Star
2	Barsingsar Lignite Mine	OC	NLCIL	2022-2023	97	5 Star
3	Jayant OCP	OC	NCL	2022-2023	95	5 Star
4	JHINGURDA	OC	NCL	2022-2023	95	5 Star
5	KULDA OPENCASST PROJECT	OC	MCL	2022-2023	95	5 Star
6	DULANGA COAL MINING PROJECT	OC	NTPC Ltd.	2022-2023	94	5 Star
7	Neyveli Lignite Mine-IA	OC	NLCIL	2022-2023	94	5 Star
8	Manoharpur Coal Mine	OC	OCPL	2022-2023	94	5 Star
9	Khadia project	OC	NCL	2022-2023	94	5 Star
10	BLOCK-B OCP	OC	NCL	2022-2023	93	5 Star
11	Dudhichua	OC	NCL	2022-2023	93	5 Star
12	PARSA EAST & KANTA BASAN OPENCASST COAL MINE	OC	PKCL	2022-2023	93	5 Star
13	Amlohri Open Cast Project	OC	NCL	2022-2023	92	5 Star
14	Ashok OCP	OC	CCL	2022-2023	92	5 Star
15	Talaipalli Coal Mining Project	OC	NTPC Ltd.	2022-2023	92	5 Star
16	Birsa Project	OC	CCL	2022-2023	92	5 Star
17	Dinesh Makardhokda3	OC	WCL	2022-2023	92	5 Star
18	GEVRA OCM	OC	SECL	2022-2023	92	5 Star
19	NIGAHI OCP	OC	NCL	2022-2023	92	5 Star
20	Kapurdi Lignite Mine	OC	BLMCL	2022-2023	92	5 Star
21	MAKARDHOKDA-1 OCM	OC	WCL	2022-2023	92	5 Star
22	LIGNITE MINE 1	OC	NLCIL	2022-2023	92	5 Star
23	LAKHANPUR OPENCASST PROJECT	OC	MCL	2022-2023	92	5 Star
24	AMRAPALI OCP	OC	CCL	2022-2023	91	5 Star
25	Balram OCP	OC	MCL	2022-2023	91	5 Star
26	Talabira II & III OCP	OC	NLCIL	2022-2023	91	5 Star
27	SONEPUR BAZARI OPEN CAST MINE	OC	ECL	2022-2023	91	5 Star
28	Bina Opencast	OC	NCL	2022-2023	91	5 Star
29	RAMAGUNDAM OC-I EXP. PH-II	OC	SCCL	2022-2023	91	5 Star
30	Gare Palma IV/1 Coal Mine	OC	JPL	2022-2023	91	5 Star
31	JAGANNATH OPEN CAST PROJECT	OC	MCL	2022-2023	91	5 Star
32	Jawaharkhani OC 5	OC	SCCL	2022-2023	91	5 Star
33	Magadh OCP	OC	CCL	2022-2023	91	5 Star
34	GARE PALMA IV/4 COAL MINE	OC	HIL	2022-2023	90	4 Star
35	Pakri Barwadih Coal Mining Project	OC	NTPC Ltd.	2022-2023	89	4 Star
36	Indaramkhani OC	OC	SCCL	2022-2023	89	4 Star
37	Moher & Moher Amlohri Extn. OC Project	OC	SPL	2022-2023	89	4 Star
38	KISTARAM OC	OC	SCCL	2022-2023	89	4 Star
39	Amelia (North) Coal Mine	OC	JPVL	2022-2023	88	4 Star
40	Tadicherla-1 Coal Mine	OC	TSPGCL	2022-2023	88	4 Star
41	GOKUL OCM	OC	WCL	2022-2023	88	4 Star
42	Gopalichuck Colliery	OC	BCCL	2022-2023	88	4 Star
43	MANUGURU OCP	OC	SCCL	2022-2023	88	4 Star
44	LIGNITE MINE II	OC	NLCIL	2022-2023	88	4 Star
45	LAJKURA OPEN CAST MINE	OC	MCL	2022-2023	88	4 Star



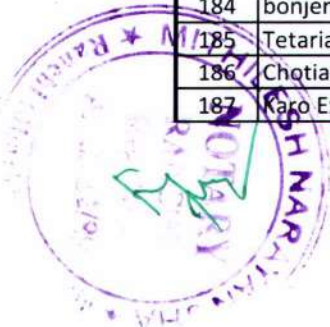
Star Rating of Open Cast mines for the performance base year 2022-23						
Sr. No.	Name of Mine	Type of Mine	Subsidiary/ Company	Financial Year	Final marks (%) awarded by CCO	Star Rating
46	Umrer OCM	OC	WCL	2022-2023	87	4 Star
47	Umarsar Lignite Mine	OC	GMDC	2022-2023	87	4 Star
48	SAMLESWARI OPEN CAST PROJECT	OC	MCL	2022-2023	87	4 Star
49	NEELJAY OPENCAST MINE	OC	WCL	2022-2023	87	4 Star
50	KAKRI OCP	OC	NCL	2022-2023	87	4 Star
51	KHAIRUGURA OCP	OC	SCCL	2022-2023	87	4 Star
52	Quarry-AB	OC	TSL	2022-2023	86	4 Star
53	ADASA UG TO OC MINE	OC	WCL	2022-2023	85	4 Star
54	BHURKUNDA A COLLIERY	OC	CCL	2022-2023	85	4 Star
55	Quarry South Eastern	OC	TSL	2022-2023	85	4 Star
56	Ghogha Surka Lignite Mine	OC	GPCL	2022-2023	85	4 Star
57	Hindustan Lalpeth Opencast Mine	OC	WCL	2022-2023	85	4 Star
58	Amalgamated I & II Yekona ocm	OC	WCL	2022-2023	84	4 Star
59	Bhubaneswari OCP	OC	MCL	2022-2023	84	4 Star
60	GARJANBAHAL OCP	OC	MCL	2022-2023	84	4 Star
61	GURHA (EAST) LIGNITE MINE	OC	VS LIGNITE	2022-2023	84	4 Star
62	Hingula	OC	MCL	2022-2023	84	4 Star
63	KHADSALIYA LIGNITE MINE	OC	GHCL LTD.	2022-2023	84	4 Star
64	KUSMUNDA PROJECT	OC	SECL	2022-2023	84	4 Star
65	KOYAGUDEM OC-II	OC	SCCL	2022-2023	84	4 Star
66	Basundhara(West) OCP	OC	MCL	2022-2023	83	4 Star
67	BHARATPUR OCP	OC	MCL	2022-2023	83	4 Star
68	Jagannathpur OCP	OC	SECL	2022-2023	83	4 Star
69	MUNGOLI OPENCAST MINE	OC	WCL	2022-2023	83	4 Star
70	MANIKPUR	OC	SECL	2022-2023	83	4 Star
71	Gare Pelma Sector III Coal Mine	OC	CSPGCL	2022-2023	82	4 Star
72	PRAKASHAMKHANI OC	OC	SCCL	2022-2023	82	4 Star
73	NMOC-II (A) EXPANSION MINE	OC	WCL	2022-2023	82	4 Star
74	Jalipa Lignite Mine	OC	BLMCL	2022-2023	82	4 Star
75	KAKATIYAKHANI OC- II	OC	SCCL	2022-2023	82	4 Star
76	KANCHAN OC EXP.	OC	SECL	2022-2023	82	4 Star
77	Amalgamated Inder Kamptee Deep OCM	OC	WCL	2022-2023	81	4 Star
78	AMALGAMATED BLOCK-II OCP	OC	BCCL	2022-2023	81	4 Star
79	Selected Dhori Opencast Mines	OC	CCL	2022-2023	81	4 Star
80	Saraipali OCM	OC	SECL	2022-2023	81	4 Star
81	DAMODA COLLIERY	OC	BCCL	2022-2023	81	4 Star
82	PENGANGA OC	OC	WCL	2022-2023	81	4 Star
83	NORTH SEARSOLE OCP	OC	ECL	2022-2023	81	4 Star
84	Junad Extension Open Cast Mine	OC	WCL	2022-2023	81	4 Star
85	Lingaraj Opencast Project	OC	MCL	2022-2023	81	4 Star
86	Urimari OCP	OC	CCL	2022-2023	80	3 Star
87	Tikak Colliery	OC	NEC	2022-2023	80	3 Star
88	SINGHORI OPENCAST MINE	OC	WCL	2022-2023	80	3 Star
89	RAMKRISHNAPUR OC	OC	SCCL	2022-2023	80	3 Star
90	JALAGAMVENGALARAO OC II	OC	SCCL	2022-2023	80	3 Star
91	Belpahar Opencast mine	OC	MCL	2022-2023	79	3 Star
92	Chjrimiri Opencast Mine	OC	SECL	2022-2023	79	3 Star
93	DURGAPUR EXTN. DEEP O/C MINE	OC	WCL	2022-2023	79	3 Star



Star Rating of Open Cast mines for the performance base year 2022-23						
Sr. No.	Name of Mine	Type of Mine	Subsidiary/ Company	Financial Year	Final marks (%) awarded by CCO	Star Rating
94	ENA COLLIERY	OC	BCCL	2022-2023	79	3 Star
95	Pauni II Expansion OC	OC	WCL	2022-2023	79	3 Star
96	GONDEGAON OPEN CAST MINE	OC	WCL	2022-2023	79	3 Star
97	Gopalji-Kaniha Expansion OCP	OC	MCL	2022-2023	79	3 Star
98	NICHITPUR COLLIERY	OC	BCCL	2022-2023	79	3 Star
99	NAIGAON OPENCAS T MINE	OC	WCL	2022-2023	79	3 Star
100	KALYANKHANI OC	OC	SCCL	2022-2023	79	3 Star
101	KHOTTADIH OCP	OC	ECL	2022-2023	79	3 Star
102	Baroud	OC	SECL	2022-2023	78	3 Star
103	RAMAGUNDAM OC - III EXTN	OC	SCCL	2022-2023	78	3 Star
104	GODAVARIKHANI COAL MINE (2&2A and No.5)	OC	SCCL	2022-2023	78	3 Star
105	Jharkhand OCP	OC	CCL	2022-2023	78	3 Star
106	KONAR EXPANSION OCP	OC	CCL	2022-2023	78	3 Star
107	AMLA OPEN CAST MINE	OC	SECL	2022-2023	77	3 Star
108	TOPA RO-OCP (A) MINE	OC	CCL	2022-2023	77	3 Star
109	Ballarpur OC mine	OC	WCL	2022-2023	77	3 Star
110	SRIRAMPUR OC II	OC	SCCL	2022-2023	77	3 Star
111	BHANE GAON OPENCAS T MINE	OC	WCL	2022-2023	77	3 Star
112	BHATADI OPEN CAS T	OC	WCL	2022-2023	77	3 Star
113	Gauri I&II (A) OC	OC	WCL	2022-2023	77	3 Star
114	KOLGAON OPENCAS T MINE	OC	WCL	2022-2023	77	3 Star
115	VASTAN MINE	OC	GIPCL	2022-2023	76	3 Star
116	VALIA LIGNITE MINE	OC	GIPCL	2022-2023	76	3 Star
117	BGKK Colliery	OC	BCCL	2022-2023	76	3 Star
118	Sasti Expansion OC	OC	WCL	2022-2023	76	3 Star
119	Dhuptala OC	OC	WCL	2022-2023	76	3 Star
120	GIDDI-A	OC	CCL	2022-2023	76	3 Star
121	Gourangdi Begunia Colliery	OC	ECL	2022-2023	76	3 Star
122	Govindpur Ph-II OCP	OC	CCL	2022-2023	76	3 Star
123	KOLARPIMPARI OPENCAS T MINE	OC	WCL	2022-2023	76	3 Star
124	ANANTA OPEN CAS T PROJECT	OC	MCL	2022-2023	75	3 Star
125	Ukni open cast	OC	WCL	2022-2023	75	3 Star
126	Tapin South OCP	OC	CCL	2022-2023	75	3 Star
127	BANSDEOPUR COLLIERY	OC	BCCL	2022-2023	75	3 Star
128	Sayal D OCP	OC	CCL	2022-2023	75	3 Star
129	Chhal OCP	OC	SECL	2022-2023	75	3 Star
130	Dabor Colliery	OC	ECL	2022-2023	75	3 Star
131	GHONSA OCM	OC	WCL	2022-2023	75	3 Star
132	KARMA OPEN CAS T PROJECT	OC	CCL	2022-2023	75	3 Star
133	Rajapur O.C.P, South Jharia Colliery	OC	BCCL	2022-2023	74	3 Star
134	NEW MAJRI UG TO OC MINE	OC	WCL	2022-2023	74	3 Star
135	New Godhur Kusunda Colliery	OC	BCCL	2022-2023	74	3 Star
136	Kabribad Re-organised Mine	OC	CCL	2022-2023	74	3 Star
137	Amod (G-19 Extn.) Lignite Mine	OC	GMDC	2022-2023	73	3 Star
138	BHOWRA SOUTH COLLIERY	OC	BCCL	2022-2023	73	3 Star
139	Chitra East OCP	OC	ECL	2022-2023	73	3 Star
140	Ramagundam OC-II Extn.	OC	SCCL	2022-2023	73	3 Star



Star Rating of Open Cast mines for the performance base year 2022-23						
Sr. No.	Name of Mine	Type of Mine	Subsidiary/ Company	Financial Year	Final marks (%) awarded by CCO	Star Rating
141	Dipka Open Cast	OC	SECL	2022-2023	73	3 Star
142	GIDDI-C	OC	CCL	2022-2023	73	3 Star
143	AAD OCM	OC	CCL	2022-2023	72	3 Star
144	Chatti Bariatu Coal Mining	OC	NTPC Ltd.	2022-2023	72	3 Star
145	RAJRAPPA OPENCAS T PROJECT	OC	CCL	2022-2023	72	3 Star
146	MUDIDIH COLLIERY	OC	BCCL	2022-2023	72	3 Star
147	TAPIN NORTH OCP	OC	CCL	2022-2023	71	3 Star
148	SENDRA BANSJORA COLLIERY	OC	BCCL	2022-2023	71	3 Star
149	DAKRA BUKBUKA COLLIERY	OC	CCL	2022-2023	71	3 Star
150	Gouri deep OC	OC	WCL	2022-2023	71	3 Star
151	Jarangdih Opencast Mine	OC	CCL	2022-2023	71	3 Star
152	Mata No Madh Lignite Mine	OC	GMDC	2022-2023	71	3 Star
153	KALIPAHARI (R) COLLIERY	OC	ECL	2022-2023	71	3 Star
154	KDH OCP	OC	CCL	2022-2023	71	3 Star
155	PAREJ EAST OCP	OC	CCL	2022-2023	70	2 Star
156	AGKCC	OC	BCCL	2022-2023	69	2 Star
157	AMAL. NT-ST-JG COLLIERY	OC	BCCL	2022-2023	69	2 Star
158	Amalgamated Dhansar Industry Colliery	OC	BCCL	2022-2023	69	2 Star
159	TETULMARI	OC	BCCL	2022-2023	69	2 Star
160	Tadkeshwar.Lignite Mine	OC	GMDC	2022-2023	69	2 Star
161	Bokaro OCP	OC	CCL	2022-2023	69	2 Star
162	Rohini OCP	OC	CCL	2022-2023	69	2 Star
163	RELIGARA	OC	CCL	2022-2023	69	2 Star
164	Rajmahal Open Cast Project	OC	ECL	2022-2023	69	2 Star
165	Gare Pelma IV/2&3 OCP	OC	SECL	2022-2023	69	2 Star
166	JAMBAD OCP	OC	ECL	2022-2023	69	2 Star
167	KANKANEE COLLIERY	OC	BCCL	2022-2023	69	2 Star
168	Kathara Colliery	OC	CCL	2022-2023	69	2 Star
169	GARE PALMA IV/7 COAL MINE	OC	SEML	2022-2023	68	2 Star
170	Jampali OCP	OC	SECL	2022-2023	68	2 Star
171	Basantimata Dahibari Colliery	OC	BCCL	2022-2023	67	2 Star
172	Bijari	OC	SECL	2022-2023	67	2 Star
173	AMADAND OCP	OC	SECL	2022-2023	66	2 Star
174	Purnadih OCP	OC	CCL	2022-2023	66	2 Star
175	MOHANPUR COLLIERY	OC	ECL	2022-2023	66	2 Star
176	KAPASARA COLLIERY	OC	ECL	2022-2023	66	2 Star
177	Kuya Colliery	OC	BCCL	2022-2023	66	2 Star
178	AMALGAMATED SUDAMDIH PATHERDIH COLLIERY	OC	BCCL	2022-2023	65	2 Star
179	AMGAON	OC	SECL	2022-2023	65	2 Star
180	Surkha (North) Lignite Mine, Bhavnagar	OC	GMDC	2022-2023	65	2 Star
181	Dalurband Colliery	OC	ECL	2022-2023	65	2 Star
182	Giridih Opencast Mine	OC	CCL	2022-2023	65	2 Star
183	Urdhan	OC	WCL	2022-2023	64	2 Star
184	bonjemihary colliery	OC	ECL	2022-2023	64	2 Star
185	Tetariakhar OCP	OC	CCL	2022-2023	63	2 Star
186	Chotia-II Coal Mine	OC	BALCO	2022-2023	62	2 Star
187	Kago Expansion OCP	OC	CCL	2022-2023	62	2 Star



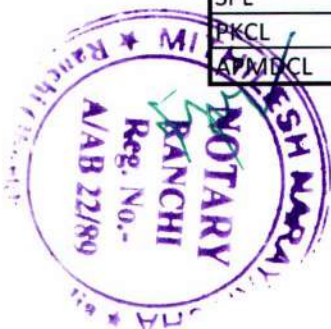
Star Rating of Open Cast mines for the performance base year 2022-23						
Sr. No.	Name of Mine	Type of Mine	Subsidiary/ Company	Financial Year	Final marks (%) awarded by CCO	Star Rating
188	Kathautia Open Cast Coal Mine	OC	HIL	2022-2023	62	2 Star
189	BARMURI OCP	OC	ECL	2022-2023	61	2 Star
190	Kujama Colliery	OC	BCCL	2022-2023	61	2 Star
191	HURRA 'C' OCP	OC	ECL	2022-2023	59	1 Star
192	PACHHRWARA NORTH COAL MINE	OC	WBPDC	2022-2023	58	1 Star
193	C.L. Jambad OC (H)	OC	ECL	2022-2023	57	1 Star
194	NIRSHA OCP	OC	ECL	2022-2023	57	1 Star
195	Suliyari Coal Mine	OC	APMDC	2022-2023	56	1 Star
196	RAJPURA COLLIERY	OC	ECL	2022-2023	54	1 Star
197	GANGARAMCHAK & GANGARAMCHAK-BHADULIA COAL MINE	OC	WBPDC	2022-2023	54	1 Star
198	SIRKA	OC	CCL	2022-2023	52	1 Star
199	Dhanpuri Opencast Mine	OC	SECL	2022-2023	52	1 Star
200	East Basuria Colliery	OC	BCCL	2022-2023	51	1 Star
201	SHARDA OPEN CAST MINE	OC	SECL	2022-2023	50	1 Star
202	Marki Mangli I	OC	TUML	2022-2023	50	1 Star
203	Gourangdih(A)Colliery	OC	ECL	2022-2023	48	1 Star
204	Barjora(North) Coal Mine	OC	WBPDC	2022-2023	47	1 Star
205	Jamkhani Coal Mine	OC	Vedanta Ltd	2022-2023	47	1 Star
206	RAJHARA COLLERY	OC	CCL	2022-2023	46	1 Star
207	ABGC	OC	BCCL	2022-2023	45	1 Star
208	Utkal-D Coal Mine	OC	NALCO	2022-2023	44	1 Star
209	AMAL JOYRAMPUR COLLIERY	OC	BCCL	2022-2023	43	1 Star
210	Kedla opencast project	OC	CCL	2022-2023	42	1 Star
211	BARJORA COAL MINE	OC	WBPDC	2022-2023	41	1 Star
212	Damagoria Colliery	OC	BCCL	2022-2023	38	No Star
213	Integrated Baranj Open Cast	OC	KPCL	2022-2023	26	No Star
214	Sonari Lignite Mines	OC	RSMM	2022-2023	25	No Star
215	Giral Lignite Mines	OC	RSMM	2022-2023	22	No Star
216	SIKNI OPEN CAST MINE	OC	JSMDCLTD	2022-2023	18	No Star



Annexure-C

Star Rating of Mix mines for the performance base year 2022-23						
Sr. No.	Name of Mine	Type of Mine	Subsidiary/ Company	Financial Year	Final marks (%) awarded by CCO	Star Rating
1	GP IV/8 Coal Mine	MX	ACL	2022-2023	88	4 Star
2	NAKRAKONDA-KUMARDIHI B COLLIERY	MX	ECL	2022-2023	84	4 Star
3	NEW AKASHKINAREE COLLIERY	MX	BCCL	2022-2023	83	4 Star
4	AMALGAMATED MURAIIDH PHULARITAND COLLIERY	MX	BCCL	2022-2023	82	4 Star
5	AKWMC	MX	BCCL	2022-2023	80	3 Star
6	Bastacolla	MX	BCCL	2022-2023	78	3 Star
7	KAKATIYA KHANI OPENCAS-T-III PROJECT	MX	SCCL	2022-2023	76	3 Star
8	MOHAN COLLIERY	MX	WCL	2022-2023	75	3 Star
9	Nimcha (R) Colliery	MX	ECL	2022-2023	69	2 Star
10	BANSRA	MX	ECL	2022-2023	66	2 Star
11	MADHAIPUR COLLIERY	MX	ECL	2022-2023	61	2 Star
12	CHAPAPUR COLLIERY	MX	ECL	2022-2023	55	1 Star
13	Badjna Colliery	MX	ECL	2022-2023	53	1 Star
14	CBI GROUP OF MINES	MX	ECL	2022-2023	52	1 Star

Abbreviation	
BCCL	Bharat Coking Coal Limited
CCL	Central Coalfields Limited
ECL	Eastern Coalfields Limited
MCL	Mahanadi Coalfields Limited
NCL	Northern Coalfields Limited
NEC	North Eastern Coalfields
SECL	South Eastern Coalfields Limited
WCL	Western Coalfields Limited
SCCL	The Singareni Collieries Company Limited
NLCIL	NLC India Ltd
JPVL	Jaiprakash Power Ventures Limited
WBPCCL	West Bengal Power Development Corporation Ltd
GMDC	Gujarat Mineral Development Corporation Ltd
SISCL	Sunflag Iron and Steel Company Ltd
TSL	Tata Steel Limited
UTCL	Ultra Tech Cement Limited
JPL	Jindal Power Limited
HIL	Hindalco Industries Limited
SEML	Sarda Energy and Minerals Limited
CSPGCL	Chhattisgarh State Power Generation Company Ltd
GPCL	Gujarat Power Corporation Limited
RSMML	Rajasthan State Mines and Minerals Limited
ACL	Ambuja Cements Limited
KPCL	Karnataka Power Corporation Limited
OCPL	Odisha Coal and Power Limited
TUML	Topworth Urja & Metals Limited
SPL	Sasan Power Limited
PKCL	Parsa Kente Collieries Limited
APMDCL	Andhra Pradesh Mineral Development Corporation Limited



Annexure:- 15





CCL

Fuelling Sustainable Growth
CENTRAL COALFIELDS LTD.

सेन्ट्रल कोलफील्ड्स लिमिटेड 1732

(भारत सरकार का एक उपक्रम / कोल इंडिया लि. की एक अनुषंगी कंपनी)

पंजीकृत कार्यालय : दरभंगा हाउस, रौंजी 834 001 (झारखण्ड)

CIN : U10200JH1956GOI000581

निगमित सामाजिक दायित्व (सीएसआर) विभाग

फोन: 0651- 2360500/8987784142 ईमेल: gmsdncsr.ccl@coalindia.in

वेबसाइट: www.centralcoalfields.in

Ref: CCL/GM(SD&CSR)/2024/ 995

Date: 26.04.2024

To,
The Area General Manager
Amrapali Chandragupta Area

Sub: List of Activities from CSR Annual Action Plan 2024-25

Dear Sir,

This is to communicate the list of CSR activities in respect of your Area compiled and put up as CCL's CSR Annual Action Plan 2024-25 before 75th SD&CSR Committee Meeting held on 09.04.2024 and 538th CCL Board Meeting held on 10.04.2024.

Hard copy of list of works (Commenced works & New works for 2024-25) were handed over to Nodal CSR Officer of Areas in the coordination meeting of CSR and Civil personnel held on 22.04.2024 at CCL Hq.

As briefed by D(P), CCL in the meeting dated 22.04.2024, Areas/Units are to embark on the works from Day 1, in order to ensure completion of the works which were prepared by Areas for 2024-25. It was desired that Areas/Units are to submit quarter wise & month wise plan as to when the works will commence and get completed.

You are requested to kindly instruct the concerned officers for preparation and approval of estimates, readiness for tendering, etc.

Copy of final list of works for 2024-25 as shared on 22.04.2024 is being enclosed for ready reference.

Encl.: As above

Yours faithfully,

General Manager (SD&CSR)

Copy to:

- TS to Director (Personnel), CCL – for kind information
- Staff Officer (Personnel)/(Civil), Amrapali Chandragupta Area, CCL
- Nodal Officer (CSR), Amrapali Chandragupta Area, CCL
- Office copy



CSR 2024-25 - New Projects

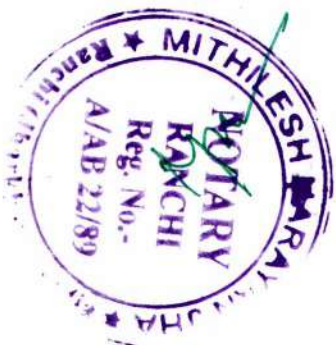
Sl. No.	Area	Sector	Name of the Activity	Project Cost in Lakhs	Expected Expenditure in 2024-25 (Rs in Lakhs)
1	AC	Health	Mosquito Net for HIV/AIDS Patients.	5.00	4.00
2	AC	Health	Blankets for distribution among project affected needy person	10.00	7.00
3	AC	Health	Provision of 08 nos. of Open Gym at different Panchayat of A-C Area	40.00	20.00
4	AC	Education	Construction of recharge Pit at Kasturba Gandhi Balika Uchch Vidalay Garilaung	12.00	6.00
5	AC	Education	Provision of Desktop, Almirah, Bookshelf, Rack, Books, Laptop, and Ceiling fan for Simariya Degree College Simariya	14.00	7.00
6	AC	Education	Provision of Desk, Bench, White Board for different Project Affected Govt. School of A-C Area	50.00	25.00
7	AC	Education	Installation of Rooftop Solar in Project Affected Govt. Schools	80.00	40.00
8	AC	Education	Construction of 08 Classrooms, Common hall and other infrastructure at Serendag High School	150.00	100.00
9	AC	Education	Construction of 10 classrooms and other infrastructure at Project Girls School Tandwa	150.00	100.00
10	AC	Environment.	Development of Talab at Dhangadda	30.00	25.00
11	AC	Environment	Installation of High Mast Solar Light Project Affected village	100.00	50.00
12	AC	Rural Development	Construction of PCC road from Chundru Baba Path to Darji Mohalla	30.00	15.00
13	AC	Rural Development	Construction of 800 m PCC Road at Dhawaiya Tand	70.00	35.00
			TOTAL	741.00	434.00



26.4.2024

सहायक (संवेदन एवं सौकर्यकार)
 Deputy Manager (SD & CSR)
 सी.सी.एल. मुख्यालय, राँची
 CCL, HQ, Ranchi

Annexure:- 16





-159-

Central Coalfields Limited

1735

A Mini Ratna Company
(A Subsidiary of Coal India Limited)

Office of the General Manager

Amrapali-Chandragupt Area,

Akashdeep, Main Road

Dakra, Ranchi (Jharkhand) 829210

Email: - gmmaarea@gmail.com

Ref: - GM/A-C/NIT-12/Award of Work/2021-22/427

Date: - 20.08.2021

To,
M/S RKTCL-BLAPPL (JV)
HIG-07, Sector-02, Shankar Nagar,
Beside Madan Complex Raipur,
Chhattisgarh- 492007

Email Id: - rktclblappljv@gmail.com
Mobile: - 7898047878

Sub: - Award of Work for "Loading and Transportation of Coal from Amrapali Coal Stockyard to Shivpur Railway Siding including water sprinkling all along the Transport Route and wagon loading at Shivpur siding under Amrapali-Chandragupt Area for a period of 04 years. Qty. 1022 Lakh Tes.

NIT No.: - CCL/GM (CMC)/AC/2021/12 Date: 12.03.2021 Tender id: - 2021_CCL_200500_1

LOA: - CCL/GM (CMC)/AC/NIT12/LOA/2021/502 Date: 19.07.2021

Dear Sir

This is in continuation of LOA issued to you vide LOA No mentioned above, issued by the General Manager (CMC), CCL. You are hereby awarded the subject work as per the terms and conditions of bid document for a period of 04 (Four) years from actual date of commencement of work as following: -

Sl No.	Description of Work	Lead (in KM.)	Qty (in L. Te.)	Estimated rate of work (in Rs./Te.)	Estimated Value of work (in Rs.)
1.	Loading of Coal by Contractor's pay loader into contractors tipping trucks at Surface Stockyard.	-	1022	8.44	86,25,68,000
02.	Transportation of Coal by suitably covered contractor's tipping trucks from Amrapali Coal Stock Yard to Shivpur Railway Siding including water sprinkling all along transportation route as per direction of Engineer-In-Charge of Amrapali OCP including weighment at both end.	06-07	613	72.59	444,97,67,000
		07-08	409	80.79	330,43,11,000
03.	Loading of coal into Railway wagons by contractor's Payloader(s) at Shivpur Railway Siding including levelling of wagons, lime sprinkling at top of Railway wagons, cleaning of track etc. as per instruction of Engineer-In-Charge of Amrapali OCP	-	1022	9.05	92,49,10,000
03.	Total (M.Rs.)				954,15,56,000



04.	Total Amount quoted (Above/Below) estimated amount (in Rs.) without GST	Below	160 20.36 %	759,88,95,198.40
(Rs. Seven Hundred Fifty-Nine Crore Eighty-Eight Lakh Ninety-Five Thousand One Hundred Ninety-Eight and Paise Forty only)				
Total Awarded Amount (In Rs.) with GST@18%				896,66,96,334.11
(Rs. Eight Hundred Ninety-Six Crore Sixty-Six Lakh Ninety-Six Thousand Three Hundred Thirty Four and Paise Eleven only)				

This work of award is placed upon the following terms and conditions:-

1. **Engineer-In-Charge:** - Project Officer, Amrapali OCP will be Engineer-In-Charge of the said work. He will be responsible for supervising and administering the contract, certifying payment due to the contractor, valuing variations to the contract, awarding extension of time and valuing compensation events. Engineer-in-Charge/Designated Officer-In-Charge may further appoint his representatives i.e. another person / Project Manager or any other competent person and notify to the contractor who is directly responsible for supervising the work being executed at the site, on his behalf under the Delegation of Powers of the company. However, overall responsibility, as far as the contract is concerned will be that of the Engineer-In-Charge/Designated Officer-In-Charge.
2. **Safety:** - The Safety of the workmen engaged by the contractor is the Sole responsibility of the Contractor. The contractor shall make all possible measures for safety as per statutory provisions. Any compensation on account of damage of person or properties of owner /contractor has to be borne by the contractor. It shall be governed by statutory provision.
3. **Accommodation:** Accommodation will be arranged by the contractors at their own risk.
4. **Payment:** - Payment will be made against bill duly acceptance of work by Engineer-In-Charge. The payment will be made strictly through E-payment from the office of AFM, M-A Area.
5. **GST:** Contractors must ensure the compliance of GST provisions as per the GST Act and Bid document.
6. **Diesel Price:** Base Rate of diesel for the instant tender shall be as 86.53 per Litre at Amrapali (as on Bid Submission end date 30.03.2021). The price variation on above rates is subject to provisions contained in Bid Document for the instant tender.
7. You shall depute your Agent/representative to be in charge of the work during the period of Contract. The Agent /representative shall receive instruction on the contractor's behalf from the Engineer-In-Charge or any official authorised by him for the purpose.
8. The day to day progress of work shall be reported to Engineer-In-Charge, Amrapali OCP.
9. Security Deposit shall consist of two parts:-
 - (a) Performance Security (1st Part) submitted at the time of Agreement, and
 - (b) Retention Money (2nd Part) to be recovered from running bills.
- a. **Performance Security (1st Part):** -

Three Numbers of Bank Guarantees having total value of **Rs. 5,69,91,800/- (Rs. Five Crore Sixty-Nine Lakh Ninety-One Thousand Eight Hundred)** only has been submitted by the said contractor only towards Performance Security (1st Part). The details of Bank Guarantee as follows: -

Waman



Sl. No.	Bank Name	B.G No.	Date of Issuance	Amount (In Rs.)	Expiry Date	Claim Date
1.	Axis Bank	03070100000710	06.08.2021	84,95,900	05.11.2025	05.11.2026
2.	IOB	001371121000041	23.07.2021	2,00,00,000	31.10.2025	31.10.2026
3.	Kotak	01321GP210016238	03.08.2021	2,84,95,900	02.11.2025	02.11.2026

b. Retention Money: -

To be recovered from the running bills. All running on Account Bills shall be paid at 95%. The balance 5 % shall be treated as retention money and will be second part of the Security Deposit.

10. Payment of Labour: The contractor/Contractors shall not pay to his employees engaged in Mining Activities of different categories less than the minimum wages for contractual works notified from time to time by company/CIL as per policy decision.
11. Failure on the part of the contractor to comply with the requirement as above shall constitute sufficient ground for cancellation of award of work and forfeiture of the Bid Security.
12. You shall be liable for any penalties as defined in the General Terms and Conditions of NIT/Tender document due to failure on your part, if any during execution of work.
13. No claim of idle labour or machineries shall be admitted under any circumstances.
14. The contractor shall arrange for the training of his employees in accordance with the Mines Vocational Training Rule, 1966 as amended from time to time, at his own cost.

All provisions of NIT, Instructions to Bidders, General Terms & Conditions (GTC) and Special Terms and Conditions (STC) will be strictly followed.

Yours faithfully

[Signature]
20/11/21
General Manager
Amrapali-Chandragupt Area
[Signature]

Copy to:-

1. The General Manager (CMC), CCL Ranchi, for kind information.
2. The Staff Officer (Min.), A-C Area.
3. The Area Finance Manager, M-A Area.
4. The Project Officer, Amrapali OCP.
5. Area Safety Officer, M-A Area.
6. Area Sales Manager, M-A Area.
7. Area Survey Officer, M-A Area.



462-File No. SO(M)/MA/19-20/202**Coal India Limited**

CIL - eOffice

CENTRAL COALFIELDS LIMITED

O/O GENERAL MANAGER, M&A AREA

SUBJECT

Main Category :

Sub Category :

Description : Proposal for Loading and Transportation of Coal (@10,000 TPD) from Amrapali Coal Stockyard and transportation of the same to CHP-CPP PPR.

OTHER DETAILS

Retention :

Priority :

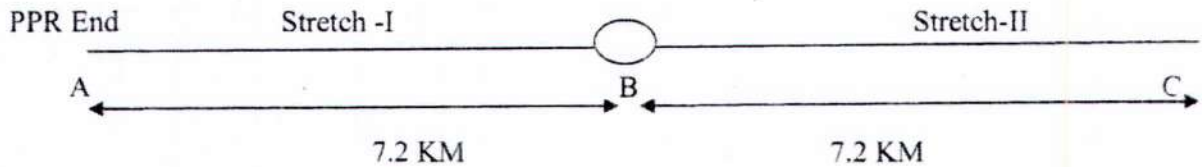
Language : English

Remarks : Proposal for Loading and Transportation of Coal (@10,000 TPD) from Amrapali Coal Stockyard and transportation of the same to CHP-CPP PPR.



Estimate for water Sprinkling all along the Transport road from Amrapali OCP to CHP- CPP PPR.

1. Diesel Consumption = 3.5 KM/Ltr
2. Hiring Charge of 12 KL Water Tanker = Rs 1840 (Prevailing Rate).
3. Pre calculated Pipe work for spray sprinkler (IS 15505) = 225Ltr /min.
4. Water Tanker speed to be considered during spraying = 8 KM /Hr.
5. Tanker speed to be considered while returning(empty tanker) = 40 KM/Hr
6. Tanker (Full) speed while non spraying= 25 KM/Hr
7. With a 12 KL at above speed and water discharge the tanker will travel = 7.2 KM.

One Tanker will run from PPR End**Stretch-I (AB)**

Time taken by the tanker while spraying = $12000/225 = 53$ Min

Time taken while returning back = $7.2 \text{ KM} / 40 \text{ KM/Hr} \times 60 \text{ min} = 10$ Min

Time for filling tanker = 30 min Approx.

Stretch II (BC)

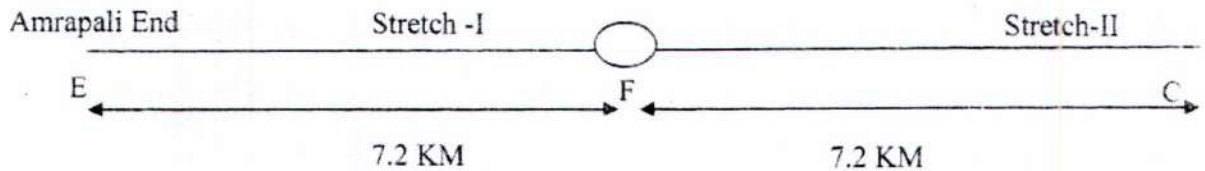
Time to reach point B = $7.2/25 = 18$ min

Time for spraying Stretch II = 53 min

Time to return to Point A = 20 min.

Total time consumed for both stretch spraying (i.e complete Cycle) = $53+10+30+18+53+20+30 = 214$ Min.

Total number of trips in one day = $24 \times 60 / 214 = 6.72$ (Say 6 Trips)

Second Tanker will run from Amrapali End.

Same Calculation as above.

Fuel Economics and Hiring Charges

Total distance travel by single tanker to complete water sprinkling in both stretch (Stretch I+ Stretch II) (i.e One Complete Trip) = 7.2(Stretch I Spraying) + 7.2 (Back) + 7.2+7.2 (Stretch II spraying) + 14.4 (Returning empty vehicle) = 43.2.

Total distance travelled by Single tanker in 24 hours = 43.2 x 6 = 259.2 Km say 260 KM

Total distance travelled by 02 tankers for 900 days = 260x2x900 = 468000

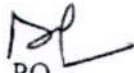
Diesel consumption for 02 numbers of tanker for 03 years = 468000/3.5 = 133715.

Total diesel cost = 133715 x 67.26 = 8993671 (I)

Total Hiring Charge = 1840 x 900 x 2 = 3312000 (II)

Total hiring charge of 02 numbers of water tankers including diesel consumption. = (I) + (II) = 8993671 + 3312000 = 12305671 .

There water spraying cost per tonne of coal = 12305671/ 10950000 = Rs 1.12 / Te
(Excluding Rainy Days)


PO

Amrapali OCP


PE(E&M)
Amrapali OCP

SO(E&M)
M&A Area.





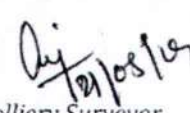
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1741


ESTIMATED FOR LOADING OF COAL FROM AMRAPALI OCP COAL STOCK YARD AND TRANSPORTATION OF THE SAME TO CHP-CPP-PPR VIA AMP COAL STOCK-W/B-KUMRANG KALAN CHECKPOST-SHAHID CHOWK-TELIPARA-JORATALAB-KALYANPUR-KARO-W/B CHP-CPP-PPR AND COVERING THE LOADED TRUCKS OF COAL SUITABLY INCLUDING WATER SPARKLING ALL ALONG THE TRANSPORT ROUTE FOR A PERIOD 03 YEARS.

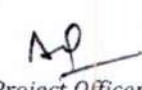
DESCRIPTION OF WORK	PERIOD	LEAD (IN KM.)	QUANTITY (IN L. TE.)	RATE (IN RS./TE.)	AMOUNT (IN LAKH RS.)
LOADING BY PAY LOADER	3 Years	--	109.5	8.73	955.935
Loading and transportation of coal from Amrapali Coal Stock Yard to CHP-CPP-PPR VIA AMP COAL STOCK-W/B-KUMRANG KALAN CHECKPOST-SHAHID CHOWK-TELIPARA-JORATALAB-KALYANPUR-KARO-W/B CHP-CPP-PPR AND COVERING THE LOADED TRUCKS OF COAL SUITABLY INCLUDING WATER SPARKLING ALL ALONG THE TRANSPORT ROUTE FOR A PERIOD 03 YEARS.	3 Years	29-30	109.5	262.88	28785.36
Total					29741.295

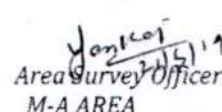
Note:- During the transportation the rule of District authority of state govt. will be followed in the road by contractor.



 Colliery Surveyor
 AMP OCP

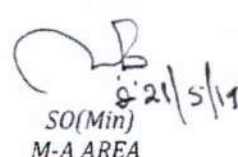

 Manager
 AMP OCP


 Dy. Manager (F)
 AMP OCP


 Project Officer
 AMP OCP


 Area Survey Officer
 M-A AREA


 Area Finance Manager
 M-A AREA


 SO(Min)
 M-A AREA



Receipt No. 328024/2019/O GENERAL MANAGER, M-A AREA
RATE 2018/19 FOR LOADING OF COAL FROM OCP COAL STOCK YARD AND TRANSPORTATION OF THE SAME TO CHP-CPP-PPR VIA AMP COAL STOCK-W/B-KUMRANG KALAN CHECKPOST-SHAHID CHOWK-TELIPARA-JORATALAB-KALYANPUR-KARO-W/B CHP-CPP-PPR AND COVERING THE LOADED TRUCKS OF COAL SUITABLY INCLUDING WATER SPARKLING ALL ALONG THE TRANSPORT ROUTE FOR A PERIOD 03 YEARS.

Item	Ref. No.& Date	Lead (in Km.)	Diesel Rate (in Rs.)	Wage Rate of unskilled worker	Rate Per Te. (in Rs.)
LOADING BY PAY LOADER	SOR 2018		60.50	509	7.61
UPDATED RATE OF LOADING at current diesel price and current wage rate.	Using formulae given in SOR 2018		67.26	830	8.73
Transportation of coal from Amrapali coal stockyard to CHP-CPP-PPR	SOR 2018	29-30	60.50	509	214.70
Updated rate of coal transportation at the current diesel price and current wage of the contractor's workers.	Using formulae given in SOR 2018	29-30	67.26	830	250.93
Additional cost on the account kutcha road (approx 2.6 km)	SOR 2018				3.65x2.6=9.49
Additional cost on the account of weighment at both the ends	SOR 2018				1.34
Additional cost on the account of water sprinkling all along the transport route.					1.12
Total cost of Transportation of coal from Amrapali coal stockyard to CHP-CPP-PPR including kuttcha road and weighment at both ends		29-30	67.26 73.08		250.93+9.49 +1.34+1.12 = 262.88

[Signature]
 Colliery Surveyor
 AMP OCP

[Signature]
 Manager
 AMP OCP

[Signature]
 Dy. Manager (F)
 AMP OCP

[Signature]
 Project Officer
 AMP OCP

[Signature]
 Area Survey Officer
 M-A AREA

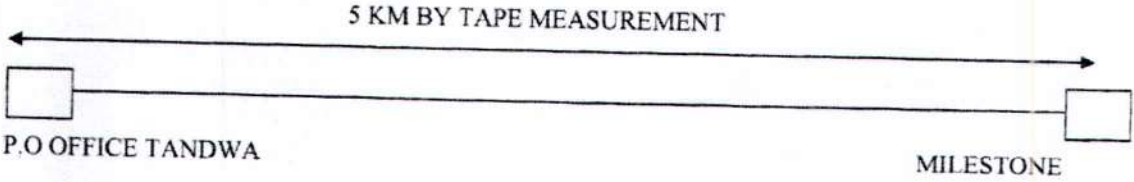
[Signature]
 Area Manager
 M-A AREA

[Signature]
 SO (Min)
 M-A AREA



Amrapali OCP
Committee Report

LEAD MEASUREMENT FOR COAL TRANSPORTATION FROM AMRAPALI OCP COAL STOCK YARD AND TRANSPORTATION OF THE SAME TO CHP-CPP-PPR VIA AMP COAL STOCK-W/B-KUMRANG KALAN CHECKPOST-SHAHID CHOWK-TELIPARA-JORATALAB-KALYANPUR-KARO-W/B CHP-CPP-PPR.



VEHICLE NO: - JH01BL2490
Actual Distance measure by Tape = 5 KM
Distance Measure by Vehicle = 5.2 KM
Correction Factor = 5/5.2
Vehicle Reading = 30.75 KM
Correct Distance = $30.75 \times 5 / 5.2 = 29.57$ KM

Distance Slab= (29.57 KM)

Colliery Surveyor
Amrapali OCP

Manager
Amrapali OCP

Dy. Manager (F)
Amrapali OCP

Project Officer
Amrapali OCP

Area Survey Officer
M-A Area

M-A Area

SO(Mining)
M-A Area

GM
M-A Area



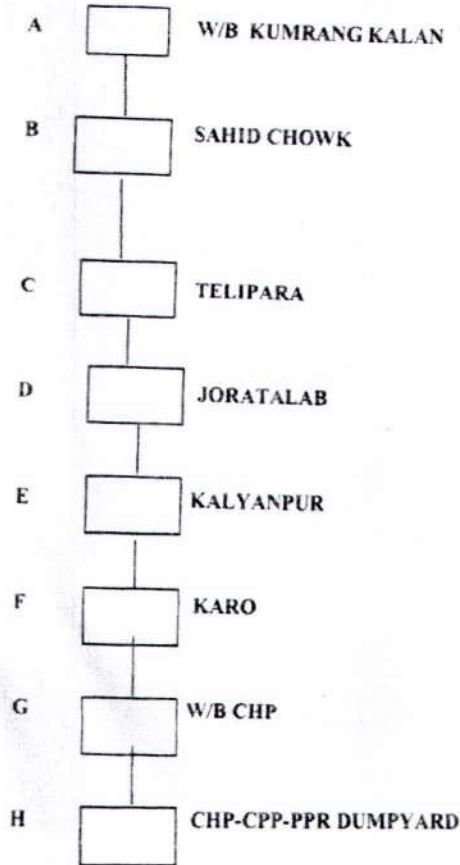
168-

1747

Amrapali OCP

Magadh Amrapali Area

LINE DIAGRAM OF COAL TRANSPORTATION FROM AMRAPALI OCP COAL STOCK YARD AND TRANSPORTATION OF THE SAME TO CHP-CPP-PPR VIA AMP COAL STOCK-W/B-KUMRANG KALAN CHECKPOST-SHAHID CHOWK-TELIPARA-JORATALAB-KALYANPUR-KARO-W/B CHP-CPP-PPR.



TRANSPORTING ROUTE ABCDEFGH = 29-30 KM

[Signature]
21/5/19
Colliery Surveyor
Amrapali OCP

[Signature]
21/5/19
Manager
Amrapali OCP

[Signature]
21/5/19
Dy. Manager (F)
Amrapali OCP

[Signature]
Project Officer
Amrapali OCP

[Signature]
21/5/19
Area Survey Officer
M-A Area

[Signature]
21/5/19
AFM
M-A Area

[Signature]
SO(Mining)
M-A Area

[Signature]
GM
M-A Area



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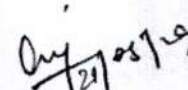
Magadh Amrapali Area

CERTIFICATE FOR THE KUTCHA FOR THE TRANSPORTATION OF COAL
FROM AMRAPALI COAL STOCK-YARD TO CHP-CPP PPR

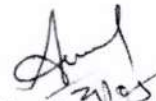
The details of the kutchra road from Amrapali OCP to CHP-CPP PPR are furnished below:-

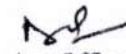
Karo to Kalvanpur W/B

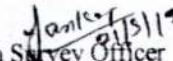
Kuttcha road = 2.6 KM

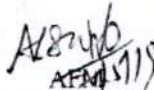

21/5/19
Surveyor
Amrapali OCP


21/5/19
Manager
Amrapali OCP


21/5/19
Dy. Manager (F)
Amrapali OCP


Project Officer
Amrapali OCP


21/5/19
Area Survey Officer
M-A Area


21/5/19
M-A Area


SO (Minting)
M-A Area


GM
M-A Area



कोल इंडिया लिमिटेड

(महाराष्ट्र कंपनी)

(भारत सरकार का उपक्रम)

"सर्वोत्तम उत्पन्न"

प्रेमार्जुन नं० 04, एमएआर प्लॉट नं० ए एफ-III

पदाग्रणी एरिया-1ए, न्यू टाउन, राजारहट

कोलकाता-700 156 (पश्चिम बंगाल)

दूरभाष सं: 033 2324 6536

फैक्स सं: 033 2324 6527

वेबसाइट: www.coalindia.in

Coal India Limited

(A MAHARATNA COMPANY)

A Govt. of India Enterprise

"Coal Bhawan"

Premises No. 04, MAR Plot No. AF-III

Action Area-1A, New Town, Rajarhat

Kolkata-700156 (West Bengal)

Phone: 033 2324 6536

Fax: 033 2324 6527

Website: www.coalindia.in

(An ISO 9001:2015, ISO 14001:2015 and ISO 50001:2011 Certified Company)

Ref.No: CIL/C-5B/JBCCI/JC/VDA/ 236

Dated: 26.04.2019

OFFICE ORDER

To,

The Chairman-cum-Managing Director,	ECL,	Sactoria
The Chairman-cum-Managing Director,	BCCL,	Dhanbad
The Chairman-cum-Managing Director,	CCL,	Ranchi
The Chairman-cum-Managing Director,	WCL,	Nagpur
The Chairman-cum-Managing Director,	SECL,	Bilaspur
The Chairman-cum-Managing Director,	NCL,	Singrauli
The Chairman-cum-Managing Director,	MCL,	Sambalpur
The Chairman-cum-Managing Director,	CMPDIL,	Ranchi

Sub: Revised Rate of VDA for the Contractor Workers as per Recommendations of Joint Committee w.e.f. 01.04.2019

The Ministry of Labour & Employment vide Order no.: F.No. 1/8(2)/2019-LS-II dated 27.03.2019 intimated the revised rate of Variable Dearness Allowance on the basis of average Consumer Price Index number for the preceding period of six months ending on 31.12.2018 reaching 303.33 from 288.33 (base 2001=100) and thereby resulting in an increase of 13.00 points for **Industrial Workers**.

Accordingly, in terms of clause (3) of Recommendations of the Joint Committee (JC), the rates of Variable Dearness Allowance payable per day w.e.f. 01.04.2019 (i.e. from 01.04.2019 to 30.09.2019) would be as under:-

Categories of employees	Rounded Off VDA to Next Rupee (Rs.) w.e.f. 01.04.2019
Unskilled	43.00
Semi-Skilled/Unskilled Supervisory	44.00
Skilled	46.00
Highly Skilled	48.00



Therefore, the Minimum Rate of Wages showing the Basic Rates and Variable Dearness Allowance payable w.e.f. 01.04.2019 will be as under:-

Categories of employees	Basic Rate of Wages (in Rs.) Per Day	VDA (in Rs.) Per Day w.e.f. 01.04.2019	Rate of Wages including VDA (in Rs.) Per Day w.e.f. 01.04.2019
Unskilled	787.00	43.00	830.00
Semi-Skilled/Unskilled Supervisory	817.00	44.00	861.00
Skilled	847.00	46.00	893.00
Highly Skilled	877.00	48.00	925.00

Other terms and conditions mentioned in the Office Order Ref. No.: CIL/C-5B/JBCCI/JC Wages/995 dated 09/10/2018 and Recommendations dated 04.09.2018 of the Joint Committee shall remain the same.

It is requested to take necessary action to implement the same.

This issues with the approval of the Competent Authority.


26/04/19
(D. J. Nayak)
General Manager (MP & IR)


Distribution:-

1. Director (Finance)/Director (Marketing)/Director (Technical)/Director (Personnel & IR), CIL, Kolkata
2. Director (Personnel), ECL/BCCL/CCL/WCL/SECL/NCL/MCL
3. Director(Finance, ECL/BCCL/CCL/WCL/SECL/NCL/MCL
4. Director (T/ES), CMPDIL, Ranchi.
5. Chief Vigilance Officer, CIL, Kolkata.
6. GM/TS to Chairman, CIL, Kolkata
7. General Manager, NEC, Assam
8. General Manager (CMC), CIL, Kolkata
9. General Manager (F), CIL, Kolkata
10. General Manager (Admin.), CIL, Kolkata
11. General Manager (Civil), CIL, Kolkata
12. General Manager (System), CIL with a request to upload the O/O on Website of CIL
13. Senior Manager (P/IR), CIL, Kolkata

Annexure:- 17



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Annexure-17 Photographs of Wheel washing Sysystem





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Annexure 1750

झारखण्ड राज्य प्रदूषण नियंत्रण पर्वद

JHARKHAND STATE POLLUTION CONTROL BOARD

T.A. Division Building, H.E.C., Dhurwa, Ranchi
Phone No:-0651- 2400852,2400851, 2400979, Fax No:- 2400850/138
New web:www.jspcb.nic.in; E-mail-ranchijspcb@gmail.com

Hon'ble NGT Matter
Time Bound (Urgent)

Ref no.-

Ranchi, Dated :-

From,

Rajeev Lochan Bakshi,
Member Secretary.

To,

The Project Officer,
M/s Amrapali OCP,
At – Honhe, Dist – Chatra.

Sub: - Show Cause Notice U/s 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974 and u/s 21 of the Air (Prevention and Control of Pollution) Act, 1981 – Regarding.

o/c
Ref. - JSPCB, Regional Office, Hazaribagh, letter no. 1347 dated - 30/08/2024.

Whereas, the Hon'ble National Green Tribunal, Eastern Zone Bench, Kolkata in Appeal No. 06/2020/EZ in the matter of Sanjay Chauhan Vs Union of India and Ors. was pleased to direct the JSPCB to file the additional counter affidavit by answering that the non-complied items have been complied by the Project Proponent or not.

Whereas, the Regional Officer, JSPCB Regional Office – Cum - Laboratory, Hazaribagh has inspected the Unit on 28/08/2024 and has submitted the Compliance Report of the conditions of Environmental Clearance and Consent to Operate of the same vide letter no. 1347 dated - 30/08/2024 (Copy enclosed).

Whereas, the above said Inspection Report was analyzed and it was observed that there are certain non-compliances of the conditions of Environmental Clearance and Consent to Operate.

Now therefore, in view of the above and by exercising the powers vested under section 25/26 of the Water (Prevention and Control of Pollution) Act, 1974 & under section 21 of the Air (Prevention and Control of Pollution) Act, 1981, this show cause notice is being issued to




the unit to explain the points on the non-compliance / observations of the Regional Officer, JSPCB Regional Office – Cum - Laboratory, Hazaribagh on 05/11/2024 at 11:30 AM in the office Chamber of the Member Secretary, JSPCB either in person or through an authorized representative. In case of failure to attend the said Show Cause notice an ex-parte order may be passed.

Sd/-
(Rajeev Lochan Bakshi)
Member Secretary

Memo no. - B - 2228

Ranchi, dated- 21/10/2024

Copy to: The Regional Officer, Jharkhand State Pollution Control Board, Regional Office, Hazaribagh for information and necessary action.


(Rajeev Lochan Bakshi)
Member Secretary



