

COMPLIANCE OF EC CONDITIONS of CLUSTER-VII

EC order no.: J-11015/238/2010-1A.II (M) Pt dated 12th October, 2018
(October'22 to March'23)

Sl.no.	Specific Conditions by MOEF:	Compliance
4 (i)	The project proponent shall obtain Consent to establish from the State Pollution Control Boards of Jharkhand for the proposed peak capacity of 11.42 MTPA prior to commencement of the increased production.	Complied. Consent to Establish has been obtained from JSPCB for the projects where production enhancement is planned/proposed.
4 (ii)	Transportation of coal from face to coal heap shall be carried out by truck. Further, the coal transportation from coal heap to Coal Handling Plant shall be carried out through covered trucks.	Complied. Presently coal transportation is being done by trucks covered with tarpaulin cover. Covering of trucks has been made mandatory in the transportation contract. Picture – 1.
4 (iii)	Mitigation measures to be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient numbers of water sprinklers.	Complied. Mobile Water Sprinklers are being used for Sprinkling water on transportation roads. Additionally Manual Sweeping is done on Public roads on routine basis and Truck mounted fog Canon is also used for spraying mist on transportation roads. Picture – 2 & Picture - 3.
4 (iv)	Sufficient coal pillars shall be left un-extracted around the air shaft (within the subsidence influence area) to protect from any damage from subsidence, if any.	Complied. Sufficient coal pillars have been left around air shafts as per Coal Mines Regulations 2017 and DGMS Orders.
4 (v)	Solid barrier shall be left below the roads falling within the block to avoid any damage to the roads and no depillaring operation shall be carried out below the township/colony.	Complied.
4 (vi)	Depression due to subsidence resulting in water accumulating within the low lying areas shall be filled up or drained out by cutting drains.	Complied. Though all the operational projects are Open Cast projects still non operational underground mines are monitored for subsidence, if any and Time to time depression created by the mining operations have been filled by the locally available material and over burden.
4 (vii)	Sufficient number of pumps of adequate capacity shall be deployed to pump out mine water during peak rain fall.	Complied.
4 (viii)	The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity of 11.42 MTPA.	Complied. NOC for groundwater abstraction has been obtained from CGWA.
4 (ix)	Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.	Complied. Proper safety, health hazards and the corrective measures are being taken by Area and HQ Level Safety/Medical Board on regular basis. For proper monitoring of occupational safety, Safety officers are deputed in each mine and at Area Level, Area Safety officer looks after the same. And for health hazards doctors and dispensaries has been provided in each mine. Periodical Medical Examination Report enclosed as Annexure - VI

4 (x)	The fire dealing operations by excavating out fire should be expedited.	Complied. Mining is being carried out by OC Method and fiery coal is being excavated out.
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Generic Conditions by MOEF:

A. Mining		
i	Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.	Complied. All stipulated provisions and subordinate legislations of Mines Act 1952 are being followed.
ii	No change in mining method, calendar programme and scope of work shall be made without obtaining prior approval of the Ministry of Environment, Forest and Climate Change.	Complied.
iii	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).	Complied. Mining is being carried out abiding by mining laws and relevant circulars issued by DGMS. Mine Closure Plan, has been prepared for each Mine in this cluster. Progressive mine closure has been implemented regularly as per the approved Mine Closure Plan prepared by CMPDIL.
iv	No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980 and also adhering to The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 read with provisions of Indian Forest Act, 1927.	Complied.
B. Land reclamation and water conservation		
i	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 4:50000 scale shall be submitted to Ministry of Environment, Forest and Climate Change/Regional Office (RO).	It is being complied. Land Use Map of Cluster VII has been prepared by CMPDIL using remote sensing data for monitoring of land use pattern and for post mining land use. The land use map is attached in Annexure I.

ii	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 water courses shall be as per the approved Mining Plan/EIA/EMP report and with due approval of the concerned State/Gol 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.	It is being complied. The surface drainage plan and/or any diversion of natural water courses shall be as per the approved Mining Plan/EMP report. Approval from competent authority of State Govt. shall be sought in case of diversion of Natural Water Course. Embankment has been constructed in some areas and further embankment and stone pitching work will be carried out.
iii	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 top soil. Post-mining land be rendered usable for agricultural/forestry purposes and shall be handed over to the respective state government as specified in the guidelines for Preparation of Mine Closure Plan issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.	It is being complied. ▪ Backfilling process in abandoned pits and voids are continuously carried out along with the mining operation. ▪ Ecological restoration and Plantation shall be carried out on finalization of dumps. ▪ Abandoned Pits will be utilized for Pisciculture in Post Mining Phase.
iv	The entire excavated area, backfilling, external OB 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 pattern shall be submitted to the Ministry of Environment, Forest and Climate Change/Regional Office on six monthly basis.	Being complied.
V	The top soil shall temporarily be stored at earmarked site(s) only and shall not be kept unutilized for long. The top soil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilized 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 on six monthly basis.	It is being complied. Top soil dumps have been created separately. Top soil is spread over Slopes of OB Dumps, used in plantation activities. Top soil is spread over slopes of OB dumps and grass seed balls are thrown over it for grassing. Once the OB dump reaches its final stage it would be taken up for Three tier plantation and eco-restoration. Seeds of Native flora species are also spread on these sites. Picture – 6, 8 & 11.

C. Emissions, effluents, and waste disposal

i	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 higher values of PM10/PM2.5) 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.	Complied. Presently coal transportation is being done by trucks covered with tarpaulin cover. Covering of truck has been made mandatory in the transportation contracts. Mobile Water Sprinklers and truck mounted fog canon are used for mitigating dust from being air borne from haul roads. Manual sweeping of Public roads used for transportation is being done on routine basis and proposal of mechanical Sweeper is under process. Picture – 1 & 2
ii	Greenbelt consisting of 3-tier plantation of width not less than 7.5 m shall be developed all along the mine lease area in a phased manner. The green belt comprising a mix of native species shall be developed all along the major approach/ coal transportation roads.	Being Complied.. 3-tier plantation is being developed along mine lease area in available spaces in a phased manner. Green belt are also being developed along transportation roads .
iii	The transportation of coal shall be carried out as per the provisions and route proposed in the approved Mining 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.
iv	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 centers.	Complied. Vehicles used for transportation of coal have PUC certificate from authorized pollution testing centres.. Copy of some Pollution Under Control Certificates has been enclosed as Annexure II .
v	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.	Complied. Crushers/feeders breakers are fitted with water sprinklers Coal handling plant are enclosed with metal sheets and are fitted with water sprinklers to check fugitive emissions. Drills are operated with wetting arrangement or fitted with dust extractors Picture - 7
vi	Coal handling plant shall be operated with effective control measures viz. bag filters/water or mist sprinkling system etc. to check fugitive emissions from crushing operations, conveyor system, transfer points, etc.	Complied. Coal handling plant are enclosed with metal sheets and are fitted with water sprinklers to check fugitive emissions. Picture - 7

vii	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.	It is being complied. Mine water is used for the industrial as well as domestic purposes. Mine water is also supplied to colonies and community after filtration. Proposal for mine water supply to nearby village/community is taken up under CSR Policy of the company. Mine water is used for fire dealing as well. Rain Water Harvesting is being implemented. A MoU has been signed between Coal India Ltd. & Govt. of Jharkhand for providing mine water to nearby villages. A copy of MoU has been enclosed as Annexure III .
viii	Catch/garland drains and siltation ponds of 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 de- silted 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 utilized for dust suppression measures and green belt development. 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.	It is being complied. In phased manner, garland drains, siltation ponds, toe wall are constructed around finalized OB Dumps to prevent run off water and flow of sediments directly into the river & water bodies. Garland Drains are also prepared in monsoon season. Water collected in sumps are used for fire dealing, dust suppression and plantation activities.
ix	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 Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time. Oil and grease trap shall be installed and maintained fully functional with effluents discharge adhering to the norms. Sewage treatment plant of adequate capacity shall be installed for treatment of domestic waste.	It is being complied. Effluents discharge standards are regularly monitored by CMPDIL for cluster VII group of mines. Mine water is being treated using filter plants (Pressure, Sand filters etc.) for its further use in industrial purpose and supply to the residential areas. Mine water monitoring report has been enclosed as Annexure IV . Oil & grease Trap has been installed. Picture 10 . For domestic sewage soak pits has been provided in the residential colonies.
x	Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.	It is being complied. Rain Water Harvesting is being constructed clusterwise. Mine water is also supplied to colonies and community after filtration through pressure filters, slow sand filters and rapid sand filters. Mine sumps also act as a recharge structure for its whole catchment area.

D. Illumination, Noise & Vibration		
i	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.	Complied. Adequate illumination is being ensured in all mine locations as per DGMS standards and the same is being monitored by Area & HQ Level Safety Committees on regular basis. Illumination survey is conducted mine wise and proper records are maintained.
ii	Adequate measures shall be taken for control of noise levels below 85 dB(A) in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (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.	Complied. Personnel operating HEMMs, drilling machine and other machines comply with safety regulation and are equipped with PPEs. Training programs are also conducted at VTC for awareness. Noise monitoring data has been enclosed as Annexure V.
iii	Controlled blasting techniques shall be practiced in order to mitigate ground vibrations and fly rocks as per the guidelines prescribed by the DGMS.	Complied. DGMS regulations are followed strictly for blasting. Additionally Personnel operating HEMMs, drilling machine and other machines are given training on regular basis.
iv	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.	Complied. Noise level monitoring is done by CMPDIL on monthly basis. Noise monitoring data has been enclosed as Annexure V.
E. Occupational health & safety		
i	The project proponent shall undertake occupational health survey for initial and periodical medical examination of the workers 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 workers identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any.	It is being complied. Initial and Periodical Medical Examination (PME) of all the mining and other personnel is being carried out regularly at Area Hospital, as per the Statutes and guidelines of Director General of Mines Safety (DGMS). PME also includes check up of occupational diseases and hearing impairment. Enclosed as Annexure VI.

ii	Personnel (including outsourcing employees) working in dusty areas shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.	It is being complied. Protective respiratory devices & other PPEs are supplied to personnel working in dusty areas. Also, a separate full-fledged Human Resource Development (HRD) Department is conducting regular training programme on these issues. Apart from this Vocational Training Centers (VTCs) are existing in all the Areas of BCCL, which provides periodical training on the safety and occupational health issue to the workers.
iii	Skill training as per safety norms specified by DGMS shall be provided to all workmen including the outsourcing employees to ensure high safety standards in mines.	It is being complied. HRD Department & Area level Vocational Training Centers are conducting regular training programs. Status of training enclosed as Annexure VII. Picture - 5

F. Ecosystem and biodiversity conservation

i	The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered 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.	Complied. No endangered flora/fauna has been reported in the mining area. However, Conservation and Protection of endangered flora/fauna shall be taken with utmost priority if spotted/reported.
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G. Public hearing, R&R and CSR

i	Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the action plan submitted with budgetary provisions during the public hearing. Land ousters shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.	It is being complied. The issues raised during Public Hearing is mentioned in the EMP and measures are being taken to ensure its implementation.
ii	The project proponent shall ensure the expenditure towards socio-economic development in and around the mine, in every financial year as per the Corporate Social Responsibility Policy as per the provisions under Section 135 of the Companies Act, 2013	It is being complied. BCCL is implementing CSR activities from HQ. A separate department of CSR is engaged for the said work. Annual report is available on BCCL Website.

iii	The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.11 (M) dated 29 th 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'.	Being Complied. Rehabilitation of project affected families is being done as per Approved Master Plan for Jharia Coalfields. The points mentioned in the said Om are being complied. Annexure-VIII.
iv	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.	It shall be complied.

H. Corporate Environment Responsibility

i	The Company shall have a well laid down environment policy duly approved by Board of Directors. The environment 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 or forest norms/conditions. Also, the company shall have a defined system of reporting of non-compliances/violations of environmental norms to the Board of Directors and/or shareholders/stakeholders.	Complied. A well-defined Corporate Environment Policy has already been laid down and approved by the Board of Directors. This is also uploaded on company's website. Enclosed as Annexure IX.
ii	The project proponent shall comply with the provisions contained in this Ministry's OM dated 1 st May, 2018, as applicable, regarding Corporate Environment Responsibility	It shall be complied.
iii	The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions should be displayed on website of the Company.	Complied. A hierarchical system of the company to deal with environmental issues from corporate level to mine level already exists.
iv	A separate environmental management cell both at the project and company headquarter level, with suitable qualified personnel shall be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.	Complied. - A full-fledged Environment Department, headed by a GM (Environment) along with a suitable qualified multi-disciplinary team of executives have been established at Company Headquarters for implementation of Environment Policy of the company. - One Executive in each area has also been nominated as Nodal Officer (Environment) for looking after routine environment related jobs along

		with an Environment Management Cell at Area Level. For implementing and look after Socio-Economic Issues, an executive of Community Development Cadre is also posted at area level.
v	Action plan for implementing EMP and environmental conditions 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.	It is being complied.
vi	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	Complied. Internal audit is done periodically and third party audit has been done by ICFRE.
I. Statutory Obligations		
i	The environmental clearance shall be subject to orders of Hon'ble Supreme Court of India, Hon'ble High Court, NGT and any other Court of Law from time to time, and as applicable to the project.	Agreed
ii	This environmental clearance shall be subject to obtaining wildlife clearance, if applicable, from the Standing Committee of National Board for Wildlife.	Agreed
iii	The project proponent shall obtain Consent to Establish/Operate under the Air Act, 1981 and the Water Act, 1974 from the concerned State Pollution Control Board.	Complied.
iv	The project proponent shall obtain the necessary permission from the Central Ground Water Authority. (CGWA).	Complied. Application for obtaining NOC for usage/extraction of Ground water is already submitted to CGWA for Cluster VII group of Mines. Picture 4
J. Monitoring of project		

i	Adequate ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM ₁₀ , PM _{2.5} , SO _x and NO _x . Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. 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.	Complied. Regular Monitoring is being carried out by CMPDIL. PM10 Analysers has been installed in each operational unit. Tender for COAAQMS is already floated and is in finalization stage. Establishment of ambient environment quality monitoring stations has been finalized with the consultation of Jharkhand State Pollution Control Board. Enclosed in Annexure X.
ii	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 25.9.2000 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.	Complied. Ambient Air quality monitoring Data is regularly submitted to ministry along with compliance report. Ambient Air Quality monitoring report attached as Annexure XI .
iii	The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Coal Industry Standards vide GSR 742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board.	Complied. Effluents discharge standards are regularly monitored by CMPDIL for cluster VII group of mines. Mine water is being treated using filter plants (Pressure, Sand filters etc.) for its further use in industrial purpose and supply to the residential colonies. Mine water monitoring report has been enclosed as Annexure IV .
iv	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 27.05.2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.	Complied.
v	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 Ministry of Environment, Forest and Climate Change/Regional Office.	Being Complied. Drilling of Piezometric well has been completed and DWLR has been procured for monitoring of Ground Water level. Picture-12. CMPDI is regularly conducting study of groundwater level and quality of areas within Cluster VII. Groundwater monitoring data has been enclosed as Annexure XII.

vi	Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.	Complied. CMPDI RI-II is regularly conducting study water quality. Water Quality report attached as Annexure IV.
vii	The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental conditions to the Ministry of Environment, Forest and Climate Change/Regional Office. For half yearly monitoring reports, the data should be monitored for the period of April to September and October to March of the financial years.	Complied.
viii	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.	Complied.
K. Miscellaneous		
i	Efforts should be made to reduce energy consumption by conservation, efficiency improvements and use of renewable energy.	Being complied. Conventional bulbs are being replaced by LED bulbs and conventional fans are being replaced by BLDC fans in official/industrial premises. Energy efficient High Mast Lighting towers, energy efficient fans are being procured replacing the old ones. Solar Energy is also being harnessed at different locations in BCCL.
ii	The project authorities shall inform to the Regional Office regarding commencement of mining operations.	Agreed.
iii	A copy of the environmental clearance shall be marked to concerned Panchayat. A copy of the same shall also be sent to the concerned State Pollution Control Board, Regional Office, District Industry Sector and Collector's Office/Tehsildar Office for information in public domain within 30 days.	Complied.
iv	The EC shall be uploaded on the company's website. The compliance status of the stipulated EC conditions shall also be uploaded by the project authorities on their website and updated at least once every six months so as to bring the same in public domain.	Complied.

v	The project authorities shall advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of this clearance, informing that the project has been accorded environmental clearance and a copy of the same is available with the State Pollution Control Board and also at website of the Ministry.	Complied. Enclosed in Annexure XIII .
vi	The environmental statement for each financial year ending 31 March in Form-V is mandated to be submitted by the project proponent for the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be uploaded on the Company's website along with the status of compliance of EC conditions and shall be sent to the respective Regional Offices of the MoEF&CC by e-mail. Concerns raised during public hearing.	Complied. EC Compliance is regularly updated on company's website.
vii	The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and Rules 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.	Agreed

COMPLIANCE OF ADDITIONAL EC CONDITIONS of CLUSTER-VII

EC order no.: J-11015/238/2010-1A.II (M) Pt dated 20th August, 2020

Sl.no.	Conditions by MOEF:	Compliance
(i)	Mitigating measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient water sprinklers. Adequate corrective measures shall be undertaken to control dust emissions, which would include mechanized sweeping, water sprinkling/mist spraying on haul roads and loading sites, long range misting/fogging arrangement, wind barrier wall and vertical greenery system,	Complied. Mobile Water Sprinklers are being used for Sprinkling water on transportation roads. Picture - 2 Additionally Manual Sweeping is done on Public roads on routine basis. Truck mounted fog canon has also been procured and is in operation. Picture - 3 Green belt is being development along railway sidings and transportation roads. Picture - 7

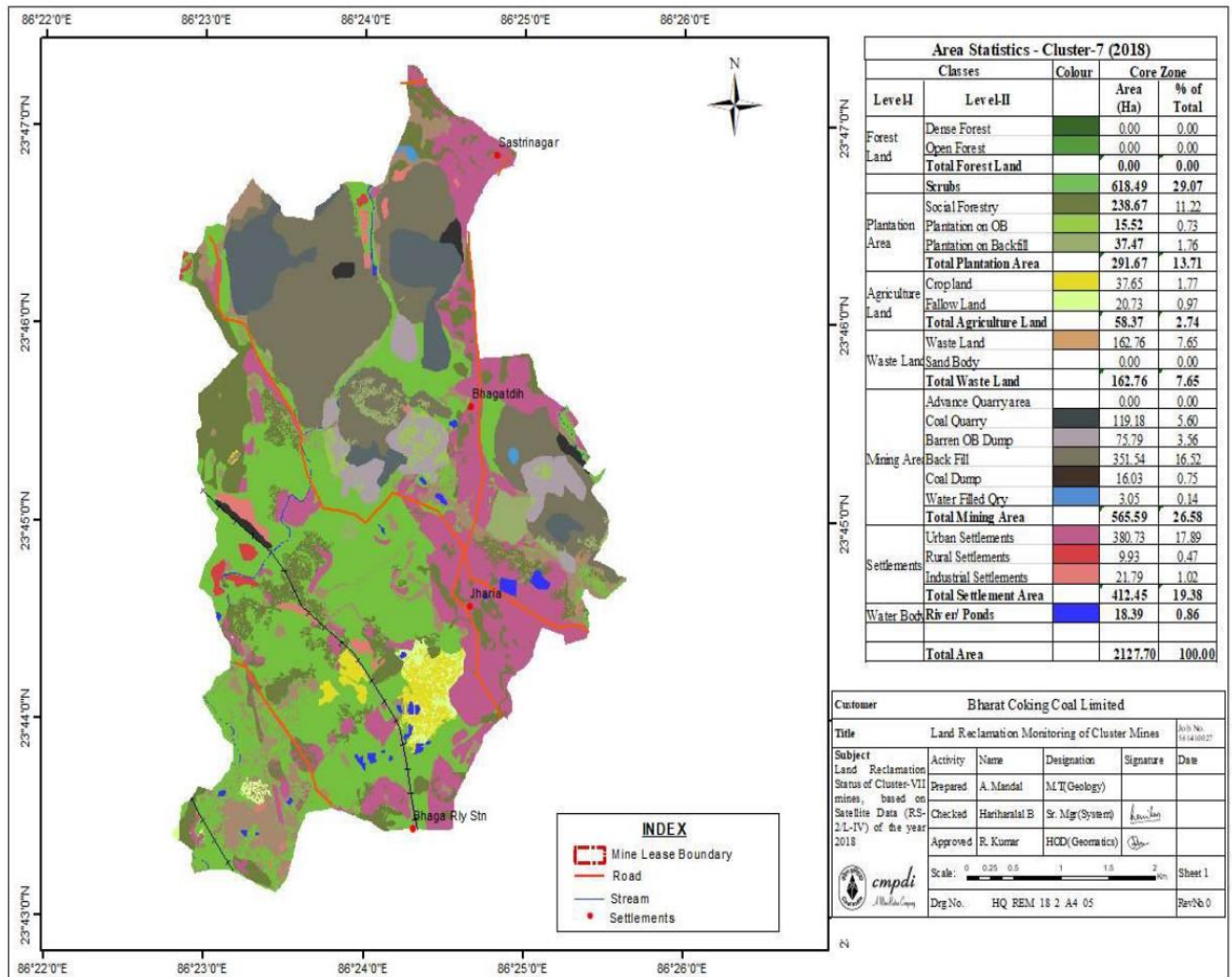
	green belt, dust suppression, arrangement at loading and unloading points, etc.	
(ii)	Continuous monitoring of occupational safety and other health hazards, and the corrective actions needs to be ensured.	Complied. Proper safety, health hazards and the corrective measures are being taken by Area and HQ Level Safety/Medical Board on regular basis. PME conducted regularly.
(ii)	Persons of nearby villages shall be given training on livelihood and skill development to make them employable.	It is being complied. Company is organizing training on regular basis through Vocational Training Centre and Human Resource Department. Also skill development for PAPs is being undertaken. Sewing Centre has been established. Picture 13
(iv)	Thick green belt of adequate width at the final boundary in the downwind direction of the project site shall be developed to mitigate/check dust pollution.	It is being complied.
(v)	Efforts shall be made for utilizing alternate sources of surface water, abandoned mines or else whatsoever and thus minimizing dependability on a single source.	It is being complied. Mine water is being used for the industrial as well as domestic purpose. Mine water is also supplied to colonies and community after filtration through pressure filters, slow sand filters and rapid sand filters. Rain Water Harvesting is being implemented in phased manner.
(vi)	Continuous monitoring of occupational safety and other health hazards, and the corrective actions needs to be ensured.	Complied. Proper safety, health hazards and the corrective measures are being taken by Area and HQ Level Safety/Medical Board on regular basis PME conducted regularly.
(vii)	A third party assessment of EC compliance shall be undertaken once in three years through reputed Government Institutes or any other expert agency identified by the Ministry.	Complied. Third party audit has been done by ICFRE.
(viii)	Active OB Dump should not be kept barren/open and should be covered by temporary grass to avoid air borne of particles.	It is being complied. Grass seed balls are spread over slopes of active OB Dumps. Picture – 6 (OB Dump Pic)
(ix)	Project Proponent shall obtain blasting permission from DGMS for conducting mining operation near villages and explore deployment of rock breakers of suitable capacity in the project to avoid blasting very near to villages. There shall be no damages caused to habitations/structures due to blasting activity.	Complied. Blasting is done after obtaining necessary permission from DGMS.
(x)	The Project proponent shall comply with all the statutory requirements and judgement of Hon'ble Supreme Court dated 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. State Government shall ensure that the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department in strict compliance of judgement of Hon'ble Supreme Court dated the 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.	Agreed.
(xi)	Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project	Complied. Initial and Periodical Medical Examination (PME) of all the mining and other personnel is being carried out regularly at Area Hospital, as per the

	and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measures for burns, malaria and provision of anti-snake venom including all other paramedical safeguards may be ensured before initiating the mining activities.	Statutes and guidelines of Director General of Mines Safety (DGMS). Report attached as Annexure VI .
(xii)	Project proponent shall follow the mitigation measures provided in Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29 th 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 the village are surrounded by the mine lease area.”	Agreed.
(xiii)	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.	It is being complied.
(xiv)	The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.	It shall be complied if any endangered fauna spotted. No endangered flora/fauna has been reported in the said area.
(xv)	Hon'ble Supreme Court in a Writ Petition(s) Civil No. 114/2014, Common Cause v Union of India & Ors vide its judgment dated 8 th January, 2020 has directed the Union of India to impose a condition in the mining lease and 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	It is being complied.

	Proponent". The implementation report of the above said condition shall be sent to Regional Office of the MoEFCC.	
5	The Project proponent shall abide by all the commitments and recommendations made in EIA/EMP report and also that during presentation to the EAC. All the commitments made on the issues raised during public hearing shall also be implemented in letter and spirit.	Agreed.
6	The project proponent shall obtain all necessary clearances/approvals required before start of the project. The Ministry or any other competent authority may stipulate any further condition for environmental protection. The Ministry or any other competent authority may stipulate any further condition for environmental protection.	Complied.
7	Any appeal against this environmental clearance lies with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Agreed.
8	The coal company/project proponent shall be liable to pay the compensation against the illegal mining, if any, and as raised by the respective State Governments at any point of time, in terms of the judgement dated 2 August, 2017 of Hon'ble Supreme Court in WP (Civil) No. 114/2014 in the matter of 'Common Cause Vs Union of India & others'.	Agreed.
9	The concerned State Government shall ensure no mining operations to commence till the entire compensation for illegal mining, if any, is paid by the project proponent through their respective Department of Mining & Geology, in strict compliance of the judgement of Hon'ble Supreme Court.	Noted.

10	This environmental clearance shall not be operational till such time the project proponent complies with the above said judgement of Hon'ble Supreme Court, as applicable and other statutory requirement.	Agreed.
11	This issues in supression of the earlier EC granted vide letter No.J-11015/238/2010-IA.II (M) dated 6th February, 2013, with approval of the competent authority.	Agreed.

LAND USE / LAND COVER MAP OF THE CLUSTER-VII MINES, BCCL



Sl no	Land Use Details	Existing (sq. meter)	Proposed (sq. meter)	Grand Total (sq. meter)
1	Green Belt Area	968.53 x 10 ⁴	968.53 x 10 ⁴	968.53 x 10 ⁴
2	Open Land	746.72 x 10 ⁴	746.72 x 10 ⁴	746.72 x 10 ⁴
3	Road/ Paved Area	380.73 x 10 ⁴	380.73 x 10 ⁴	380.73 x 10 ⁴
4	Rooftop area of building/ sheds	31.71 x 10 ⁴	31.71 x 10 ⁴	31.71 x 10 ⁴
5	Total	2127.70 x 10 ⁴	2127.70 x 10 ⁴	2127.70 x 10 ⁴

Vehicle Number	JH10S5513
Owner Name	*U*P*L* *I*G*
Registering Authority	DHANBAD, Jharkhand
Vehicle Class	Goods Carrier(HGV)
Fuel Type	DIESEL
Emission Norm	BHARAT STAGE II
Vehicle Age	14 Years & 1 months
Vehicle Status	ACTIVE

[Tap to Check the Vehicle Impound and Seizure Document Status](#)

Registration Date	06-Apr-2009
Fitness Valid UpTo	20-Jun-2023
Tax Valid UpTo	05-Jul-2023
Insurance Valid UpTo	03-May-2024
PUCC Valid Upto	03-Oct-2023

Vehicle Number	JH10BS8247
Owner Name	*.*.*R*N*P*R* *O*
Registering Authority	DHANBAD, Jharkhand
Vehicle Class	Goods Carrier(HGV)
Fuel Type	DIESEL
Emission Norm	BHARAT STAGE IV
Vehicle Age	4 Years & 4 months
Vehicle Status	ACTIVE

[Tap to Check the Vehicle Impound and Seizure Document Status](#)

Registration Date	02-Jan-2019
Fitness Valid UpTo	19-Jan-2025
Tax Valid UpTo	26-Jun-2023
Insurance Valid UpTo	23-Nov-2023
PUCC Valid Upto	08-Mar-2024

Memorandum of Understanding

for

Utilization of mine water by villages situated near mines of CIL in command area of Central Coalfields Limited, Bharat Coking Coal Limited and Eastern Coalfields Limited in the State of Jharkhand

This Memorandum of Understanding "MoU" ("Agreement") is made on 30th day of October 2017 at Ranchi

By and Between

Government of Jharkhand (hereinafter referred to as "GoJ"), represented through Department of Industries, Mines & Geology and Department of Drinking Water & Sanitation, Government of Jharkhand having its office at Ranchi which expression shall, unless the context otherwise requires, includes its successors and assignees of the FIRST PART;

And

Coal India Limited (hereinafter referred to as "CIL"), a Government of India Enterprise having its Registered Office at Coal Bhawan, Premise No-04 MAR, Plot No- AF-III, Action Area- 1A, Newtown, Rajarhat, Kolkata- 700156 and represented by General Manager, Corporate Social Responsibility, which expression shall, unless repugnant to the context or meaning thereof, be deemed to include its successors, and permitted assignees of the SECOND PART;

The expressions GoJ and CIL shall hereinafter, as the context may admit or require, be individually referred to as the 'The Party' and collectively as 'the Parties'.

Whereas:

- A.** The Government of Jharkhand (GoJ) and Coal India Limited (CIL), both parties have agreed in principle to the objective of achieving the common goal of providing surplus water from suitable mines for use by habitations, located in the command area of subsidiaries of CIL in the state of Jharkhand for their various needs. These subsidiaries are Central Coalfields Limited (CCL), Bharat Coking Coal Limited (BCCL) and Eastern Coalfields Limited (ECL).
- B.** Mine water available in mine voids and from mine discharge in Central Coalfields Limited (CCL), Bharat Coking Coal Limited (BCCL) and Eastern Coalfields Limited (ECL), subsidiaries of CIL, are presently supplied to several colonies of these subsidiary companies of CIL. At some places mine water is drawn by Department of Drinking Water & Sanitation and other agencies/ organizations of Government of Jharkhand. Surplus mine water available at other mines can be used by surrounding habitations for their various needs.
- C.** Presently, about 25250 million gallon of water is estimated to be available in 88 opencast mine voids of CCL, and about 31million gallon/ day of water is estimated to be available as surplus/excess mine water discharge at 23 mine sites of BCCL and 07mine sites of ECL in State of Jharkhand . The list of mines where water is available in mine voids in CCL and in mine water discharge in BCCL and ECL are enclosed at **Annexure I, Annexure II, and Annexure III respectively.**

D. The Parties hereby agree, undertake and affirm as under:-

- i. That sampling and analysis of quality of water available at various mine sites (voids or mine discharge), to assess the suitability for potability, agricultural or other uses will be done by a third party having a recognized environmental laboratory and the party will be selected by mutual consent between CIL (represented by its subsidiaries - CCL, BCCL and ECL) and GoJ.
- ii. The report of analysis of quality of water of various mine sites will be submitted by the selected third party to GoJ and CIL (represented by its subsidiaries - CCL, BCCL and ECL).
- iii. That cost of sampling and analysis of quality of water of various mine sites will be borne by CIL (represented by its subsidiaries - CCL, BCCL and ECL).
- iv. That CIL (represented by its subsidiaries CCL, BCCL and ECL) shall bear all initial cost for construction of civil works like foundation, platform and shed for installation of motor and pumps for drawal of water at identified mine sites.
- v. That Government of Jharkhand shall bear the cost of pumps, motors, associated power supply, pipelines and their installation at identified mine sites from where water is to be drawn. The cost of running these facilities would be borne by Government of Jharkhand or community benefitted.
- vi. The construction, operation and maintenance cost for treatment and distribution facilities of water from identified mine sites will be borne by GoJ.

- vii. The list of mine sites where water is available in voids or as mine discharge are placed at **Annexure I, Annexure II, and Annexure III** for **CCL, BCCL, and ECL** respectively. The number of mine sites may increase / decrease in future. So modalities for pumping water from the additional sites will be same as laid down at serial no D (i) to D (vi).
- viii. In case of dispute, the matter shall be mutually resolved and either party will not be held responsible for non discharge of responsibility under this agreement.
- ix. In case of force majeure or an Act of God, preventing the parties from fulfilling part or all the obligations, both parties shall be exonerated from carrying out further action as per MoU until the force majeure no longer exists.
- x. The MoU will be in force for 30 (thirty) years. The MoU may be renewed as mutually agreed upon by CIL (represented by its subsidiaries CCL, BCCL and ECL) and GoJ beyond the mentioned period of MoU.

Provided further that in case dewatering is required to start coal production in national interest from these mines then the parties will sit together and mutually decide modalities for the same.

- xi. The sustainability of mine sites in respect of future availability of water will be assessed/ studied by CIL.
- xii. This MoU shall be in accordance with applicable Acts, Rules and Guidelines for coal mining including mine closure guidelines and shall not be in contravention with provisions made therein.

IN WITNESS THEREOF, both parties hereto have signed this MoU
in two original copies in English on the date indicated above.

For Coal India Limited

For Government of Jharkhand

Department of Industries, Mines &
Geology

1. Siddh Nath Singh, General
Manager, CSR,
Coal India Limited

1. Aboobacker Siddique P., I.A.S.
Mines Commissioner,
Mines & Geology Department,
Government of Jharkhand.

(.....)

(.....)

Drinking Water & Sanitation
Department

2. Ramesh Kumar,
Engineer in Chief,
Drinking Water & Sanitation
Department, Government of
Jharkhand.

(.....)

Witness 1 (Soumitra Singh)

Witness 1

30/10/14
(Ajay Nath Singh)

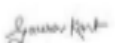
Witness 2

Witness 2

  cmpdi <i>A Min-Roha Company</i>		CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED Environment Laboratory, Regional Institute-II MINE EFFLUENT TEST REPORT			CMPDIL, RI-II KOYLA BHAWAN COMPLEX DHANBAD. -826005 Phone:0326-223-850 email: rdri2cmpdi@coalindia.in		
Test Report for Mine Effluent samples							
Month & Year	3/2023	Cluster	Cluster VII		Report No.	RI-II/WATER/2022-23/12	
Customer	Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)					Date of Issue	29.04.2023
Project		Sampling Ref. No.	REM/BCCL/2023/12		Sampling Method	IS 3025 (Part-1) CMPDI/RI-II/LPM 13	
Sampling Stations	(i)	Dhansar OCP	Sample Collected in 2.5 Ltr Jerricane, Color as observed is transparent			Period of Analysis	06.03.23 TO 17.04.23
			Date of Sampling		13.03.23	27.03.23	
			Observed Values		STANDARDS FOR COAL MINES (Stipulated by Ministry of Environment and Forests (MoEF), Vide Notification No. GSR 742(E), Dt: 25.09.2000)		
Sl. No.	Parameter	Method of Analysis	First Fortnight	Second Fortnight	LDL		
1	Total Suspended Solids	IS 3025/17:1984, R :2017, Gravimetric	44	42	100 (Max)		
2	pH	IS-3025/11:1983, R-2017, Electrometric	7.98	7.91	5.5 - 9.0		
3	Oil & Grease	IS 3025/39:1991, R : 2019, Partition Gravimetric	<2.0	<2.0	10 (Max)		
4	COD	APHA 23rd Edition 5220 C Titrimetric Method	24	20	250 (Max)		
<i>**All units in mg/L unless specified otherwise. *LDL indicates Lower Detection Limit & BDL indicates Below Detection Limit.</i> <i>**Grab sampling carried out for water samples.</i>							
ANALYSED BY		(Kumar Vaibhav)		REVIEWED BY			
				(Amit Raj Mishra)			
				Authorised Signatory			
Note: The results above relate to the samples tested as received. This report can not be reproduced in part or full without the written permission of the HOD(Env), CMPDI, RI-II. --- End of Report ---							
Page -1 of 1							

  cmpdi <i>A Min-Roha Company</i>		CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED Environment Laboratory, Regional Institute-II MINE EFFLUENT TEST REPORT			CMPDIL, RI-II KOYLA BHAWAN COMPLEX DHANBAD. -826005 Phone:0326-223-850 email: rdri2cmpdi@coalindia.in		
Test Report for Mine Effluent samples							
Month & Year	2/2023	Cluster	Cluster VII		Report No.	RI-II/WATER/2022-23/11	
Customer	Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)					Date of Issue	31.03.2023
Project		Sampling Ref. No.	REM/BCCL/2023/11		Sampling Method	IS 3025 (Part-1) CMPDI/RI-II/LPM 13	
Sampling Stations	(i)	Dhansar OCP	Sample Collected in 2.5 Ltr Jerricane, Color as observed is transparent			Period of Analysis	06.02.2023 to 24.03.2023
			Date of Sampling		06.02.2023	27.02.2023	
			Observed Values		STANDARDS FOR COAL MINES (Stipulated by Ministry of Environment and Forests (MoEF), Vide Notification No. GSR 742(E), Dt: 25.09.2000)		
Sl. No.	Parameter	Method of Analysis	First Fortnight	Second Fortnight	LDL		
1	Total Suspended Solids	IS 3025/17:1984, R :2017, Gravimetric	44	42	100 (Max)		
2	pH	IS-3025/11:1983, R-2017, Electrometric	7.39	7.55	5.5 - 9.0		
3	Oil & Grease	IS 3025/39:1991, R : 2019, Partition Gravimetric	<2.0	<2.0	10 (Max)		
4	COD	APHA 23rd Edition 5220 C Titrimetric Method	28	32	250 (Max)		
<i>**All units in mg/L unless specified otherwise. *LDL indicates Lower Detection Limit & BDL indicates Below Detection Limit.</i> <i>**Grab sampling carried out for water samples.</i>							
ANALYSED BY		(Kumar Vaibhav)		REVIEWED BY			
				(Amit Raj Mishra)			
				Authorised Signatory			
Note: The results above relate to the samples tested as received. This report can not be reproduced in part or full without the written permission of the HOD(Env), CMPDI, RI-II. --- End of Report ---							
Page -1 of 1							

Annexure V

  		CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED Environment Laboratory, Regional Institute-II Ambient Noise Level Test Report				CMPDI, RI-II KOYLA BHAWAN COMPLEX DHANBAD - 826005 Phone: 0326-223-850 email: rdri2cmpdi@coalindia.in		
Month & Year	03/2023	Cluster	Cluster VII			Report No.	RI-II/NOISE/2022-23/12	
Customer	Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bcl@coalindia.in)					Date of Issue	29.04.2023	
Project		Sample Ref. No.	REM/BCCL/2023/12		Sampling Method	CMPDI/RI-II/LPM 13		
Sampling Stations	i	Kusunda OCP	Date of Sampling	14.03.2023	24.03.2023	Zone Category of Station:	Core Zone	
Sl. No.	Parameter	Hour / Time of day	Observed Values (in Leq dB(A)) First Fortnight	Observed Values (in Leq dB(A)) Second Fortnight	Method of Analysis	Range Of Testing	LDL	NOISE POLLUTION (REGULATION AND CONTROL) RULES, 2000 Standards Zones Limits in dB
1	Noise Level dB(A)Leq - Day	06:00 - 07:00	52.5	52.8	CPCB, Protocol for Ambient Level Noise Monitoring - 2015	35 dB-135 dB	35 dB(A)	Industrial Commercial Residential Silence
2		07:00 - 08:00	56.1	55.1				
3		08:00 - 09:00	59.5	55.4				
4		09:00 - 10:00	65.2	63.3				
5		10:00 - 11:00	67.5	66.2				
6		11:00 - 12:00	66	64.6				
7		12:00 - 13:00	69.2	67.7				
8		13:00 - 14:00	70.7	68.3				
9		14:00 - 15:00	70.7	63.1				
10		15:00 - 16:00	62.7	62				
11		16:00 - 17:00	62.9	70.4				
12		17:00 - 18:00	62.4	61				
13		18:00 - 19:00	60.7	60				
14		19:00 - 20:00	60.9	59				
15		20:00 - 21:00	59.3	58.3				
16		21:00 - 22:00	59.7	58.4				
		Leq DAY	65.4	64.1				
1	Noise Level dB(A)Leq - Night	22:00-23:00	52.8	58.7	CPCB, Protocol for Ambient Level Noise Monitoring - 2015	35 dB-135 dB	35 dB(A)	Industrial Commercial Residential Silence
2		23:00-00:00	52	58.7				
3		00:00-01:00	50.9	58.3				
4		01:00-02:00	46.8	58.2				
5		02:00-03:00	45.3	57.8				
6		03:00-04:00	44.3	57.3				
7		04:00-05:00	43.2	57				
8		05:00-06:00	44.8	56.8				
		Leq NIGHT	49.0	57.9				
*LDL indicates Lower Detection Limit								
**All noise measurements are integrated for a 01 hour period, All units in dB(A)								
Sampling Assistants		 (Gaurav Kant)			 (Amit)			
ANALYSED BY		REVIEWED BY			Authorised Signatory			
Note: The results above relate to the samples tested as received. This report can not be reproduced in part or full without the written permission of the HOD(Env), CMPDI, RI-II.								
--- End of Report ---								
Page -1 of 1								



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

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

Month & Year	02/2023	Cluster	Cluster VII			Report No.	RI-II/NOISE/2022-23/11	
Customer	Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bcl@coalindia.in)					Date of Issue	31.03.2023	
Project		Sample Ref. No.	REM/BCCL/2023/11		Sampling Method	CMPDI/RI-II/LPM 13		
Sampling Stations	i	Kusunda OCP	Date of Sampling	10.02.2023	16.02.2023	Zone Category of Station:		Core Zone
Sl. No.	Parameter	Hour / Time of day	Observed Values (in Leq dB(A)) First Fortnight	Observed Values (in Leq dB(A)) Second Fortnight	Method of Analysis	Range Of Testing	LDL	NOISE POLLUTION (REGULATION AND CONTROL) RULES, 2000 Standards Zones Limits in dB
1	Noise Level dB(A)Leq - Day	06:00 - 07:00	49.1	49.4	CPCB, Protocol for Ambient Level Noise Monitoring - 2015	35 dB-135 dB	35 dB(A)	Industrial Commercial Residential Silence 75 65 55 50
2		07:00 - 08:00	52.5	51.9				
3		08:00 - 09:00	55.6	51.8				
4		09:00 - 10:00	61	59.2				
5		10:00 - 11:00	63.1	61.9				
6		11:00 - 12:00	61.7	60.4				
7		12:00 - 13:00	64.7	63.2				
8		13:00 - 14:00	66.1	63.8				
9		14:00 - 15:00	66.1	59				
10		15:00 - 16:00	58.6	58				
11		16:00 - 17:00	58.8	65.8				
12		17:00 - 18:00	58.3	57				
13		18:00 - 19:00	56.7	56.1				
14		19:00 - 20:00	56.9	55.1				
15		20:00 - 21:00	55.4	54.5				
16		21:00 - 22:00	55.8	54.6				
		Leq DAY	61.0	59.8				
1	Noise Level dB(A)Leq - Night	22:00-23:00	55	40.3	CPCB, Protocol for Ambient Level Noise Monitoring - 2015	35 dB-135 dB	35 dB(A)	Industrial Commercial Residential Silence 70 55 45 50
2		23:00-00:00	54.1	40.3				
3		00:00-01:00	53	39.8				
4		01:00-02:00	48.8	39.7				
5		02:00-03:00	47.1	39.4				
6		03:00-04:00	46.1	38.9				
7		04:00-05:00	44.9	38.6				
8		05:00-06:00	46.6	38.4				
		Leq NIGHT	51.0	39.5				
*LDL indicates Lower Detection Limit								
**All noise measurements are integrated for a 01 hour period, All units in dB(A)								
Sampling Assistants		 (Gaurav Kant)			 (Amit Raj Mishra)			
ANALYSED BY		REVIEWED BY			Authorised Signatory			
Note: The results above relate to the samples tested as received. This report can not be reproduced in part or full without the written permission of the HOD(Env), CMPDI, RI-II.								
---- End of Report ----								
Page -1 of 1								

Annexure VI**Status of Periodical Medical Examination**

Sl. No.	Name of Area/ Mine/ Office	October	November	December	January	February	March
1	ADIC	60	68	35	15	0	0
2	ENA	4	1	2	3	0	0
3	Kusunda	40	45	74	33	0	0
4	Burragarh	3	2	2	3	0	0
4	Hurrladih	2	1	4	2	0	0
5	Kustore Colliery	1	2	1	1	0	0
6	Rajapur/S-Jharia	20	21	7	0	0	0
7	AEBSC	7	5	11	0	0	0
Total		137	145	136	57	0	0

Annexure VII**Status of Training**

Sl. No.	Month	Refresher Training	Initial Training	Contractual Worker	Change of Job	Special Training
1	October	26	1	0	0	0
2	November	32	0	0	0	27
3	December	36	0	8	3	13
4	January	33	3	0	0	15
5	February	49	0	10	0	0
6	March	39	3	8	0	42
Total		215	7	26	3	97

Ref No- BCCL/KA/ED/2022/178

To
The General Manager (Estate)
Koyla Bhawan
Sub- Submission of Monthly Report

Date-09/11/22

Sub- Submission of Monthly Report												
Status of unauthorised Encroachment on Coal Bearing Area in Kusunda Area , BCCL AS ON 09.11.2022												
Area	NO. Of Encroachers			No of Case Filed			No of order Passed			Possession taken		
	Quarter	Land	Total	Quarter	Land	Total	Quarter	Land	Total	Quarter	Land	Total
KUSUNDA	892	1290	2182	892	1290	2182	544	474	1018	700	140	840
Status of unauthorised Encroachment on Non Coal Bearing Area in Kusunda Area, BCCL AS ON 03.08.2022												
Area	NO. Of Encroachers			No of Case Filed			No of order Passed			Possession taken		
	Quarter	Land	Total	Quarter	Land	Total	Quarter	Land	Total	Quarter	Land	Total
KUSUNDA	327	192	519	327	192	519	317	57	374	107	0	107
Status of transfer of Title of Agreemental Land as on 03.09.2022												
Area	No. of Employment given	Under CNT Act	CNT Free	Total	Files Given to Advocate (for CNT Cases)	Case Filed (CNT)	Order Passed	Schedule for Filling rest cases	Remarks	Status		
KUSUNDA	10	5	1	6	5	5	2 Under CNT	Nil	Four Nos. of file submitted to HQ for approval, no decision has been taken by HQ as the land is Vested Land			

Addl. General Manager
Kusunda Area

Area Manager (Estate)
Kusunda Area

C.C. to : The General Manager, Kusunda Area
The AM (Personnel/ Admin), Kusunda Area



COAL INDIA LIMITED



CORPORATE ENVIRONMENT POLICY

2018

Environmental Policy Statement:

Coal India Limited(CIL) is committed to promote sustainable development by protecting the environment through integrated project planning & design, prevention/mitigation of pollution, conservation of natural resources, restoration of ecology & biodiversity, recycling/ proper disposal of wastes, addressing climate change and inclusive growth. It also aims to bringing awareness amongst its stakeholders for continual improvement in environmental performances following best practices.

OBJECTIVES:

Coal India Limited shall endeavor to:

- 1. Plan & design projects with due consideration to environmental concerns for Sustainable Development.*
- 2. Conduct mining and associated operation in an environmentally responsible manner to comply with applicable laws and other requirements related to environmental aspects.*
- 3. Prevent pollution of surrounding habitation by continuous monitoring and adopting suitable measures for environment protection.*
- 4. Implement Environment Management Plans in all our mines /projects effectively to mitigate pollution, conservation of natural resources and restoration of ecology & biodiversity.*
- 5. Ensure compliance of all applicable Environmental Clearance& Forestry Clearance conditions and other statutory conditions issued by regulatory agencies.*
- 6. Recycling of wastes on the principle of REDUCE, REUSE and RECYCLE.*
- 7. Put special thrusts on efficient energy utilization / renewable energy as a measure to reduce carbon foot-print.*
- 8. Strive for continual improvement in our environmental performances by setting targets, measuring progress and taking corrective action.*
- 9. Taking measures to render productive post mining land use.*
- 10.Implementation of activities applicable to CIL arising out of International Conventions.*
- 11.Create environmental awareness among the employees and the local communities through pro-active communication and training.*

STRATEGIES FOR IMPLEMENTATION OF ENVIRONMENTAL POLICY:

Back Ground:

Coal India Limited subscribes to the view of Sustainable Development. Unless the environment can sustain all the developmental activities, any pursuit of development in isolation can cause irreparable damage to the ecosystem and associated environmental attributes. Keeping this view in mind, Coal India Limited attaches top priority towards sustainable development and approved its 'Corporate Environmental Policy' in December 1995, which was subsequently revised in 2012. However the present policy is the amendment of the 2012 Policy and is complimentary to the National Environmental Policy, 2006.

This modification in the present policy is the outcome of the experience gained since 2012 keeping in view the modifications / amendments made time to time in environmental policies and additional stipulation notified by MoEF&CC (Ministry of Environment, Forest& Climate Change) and other organisations concerning mine closure, reclamation of degraded land, environmental clearance etc. and also with the objective of revisiting the corporate policy.

This Policy has a vision of Green Mining and mission of 100% compliance of environmental statutes applicable to coal mining industry.

Strategies: Coal India adopts the strategies appended below for effective implementation:

1. MINE/ PROJECT PLANNING & DESIGN FOR SUSTAINABLE DEVELOPMENT:

- a) Coal being a non-renewal energy source, extraction shall be planned prudently to meet national requirement in a planned way. The projects shall be designed on the principle of Sustainable Development with due consideration to environment, mine closure, safety and aspirations of the stakeholders at the planning& design stage itself with due regard to mine closer plan.
- b) While preparing the Mining plan/project reports, the effort shall be to incorporate latest mining technologies and equipment's with optimal capacity, which are more environment friendly.

- c) All Mining Plan/ project reports will be provided with detailed provisions for ensuring environmental compliances.

2. ENVIRONMENTAL IMPACT ASSESSMENT (EIA) & ENVIRONMENT MANAGEMENT PLAN (EMP)

- a. All mine planning and design shall be environmentally acceptable and operation shall be carried out in such a way as to facilitate the compliance of stipulated environmental standards.
- b. EIA& EMP for all projects shall be formulated as per the approved ToR (Terms of Reference) and public consultations for obtaining Environmental Clearance (EC) from MoEF&CC. Similarly, in the existing projects needing enhancement of production capacities with or without increase in land, change of technology, renewal of lease and change in land use etc. fresh EC is required to be sought as per norms. The projects shall be operated after obtaining Consent to Establish (CTE)/Consent to Operate (CTO) from State Pollution Control Boards (SPCB).
- c. Detailed Mine Closure Plans shall be prepared for all existing and new mines as per the MoC (Ministry of Coal) guidelines.

3. COMPLIANCE OF THE STATUTORY REQUIREMENTS:

The implementation of EMP and fulfillment of all other statutory requirements like conditions of EC, FC and consents to establish & operate, including timely submission of returns to statutory bodies and various agencies, are to be ensured at all levels.

4. MEASURES TO MITIGATE POLLUTION:

a) Air Pollution:

- i) Generation of dust is to be controlled at the source to the possible extent with necessary control measures during drilling, blasting, loading, unloading, CHP transfer points etc.
- ii) Deployment of eco-friendly mining technologies.
- iii) Dust generation is to be minimized along coal / waste transportation routes.
- iv) Mechanized transportation of coal to be encouraged.
- v) Green belt is to be created around the source of dust.

b) Water pollution:

- i) The mine water and other effluent shall be treated to ensure the discharge norms as per statute. The treated effluent shall be utilized to the extent possible with a view to achieve maximum water conservation.
- ii) Oil & grease from the effluent shall be removed by Oil & Grease Traps for proper disposal.

c) Noise / ground vibration:

- i) All measures to minimize noise pollution will be taken including maintenance of HEMM, equipment and provision of PPE where required.
- ii) Suitable controlled blasting techniques shall be followed to reduce ground vibration as well as noise pollution.

d) Land reclamation:

- i) Progressive and concurrent reclamation of mined out areas will be carried out as per approved EIA/EMP and Mine Closure Plan (MCP).
- ii) Slopes of external dumps are the important area to be suitably graded / terraced for effective reclamation and plantation.
- iii) Preservation of top soil is required for future use. Old as well as existing non- active dumps are to be technically and biologically reclaimed.
- iv) Monitoring of reclamation work of all opencast mines will be done through Satellite Surveillance. The outcome shall be put in the websites.

e) Mine closure plans:

Mine Closure Plan (MCP) shall be prepared for each mine. MCP are being delineated in two phases viz. progressive and final mine closure. Appropriate funds are set aside and deposited under a special Escrow fund every year as per MoC guidelines, to be utilized for proper and final mine closure.

For mines closed prior to issuance of MoC guidelines (i.e. 27th August, 2009) suitable action to be taken as per provisions of Mines Act 1952.

f) Mine fire

CIL shall endeavour to reduce occurrence of mine fire and subsidence due to mining activity. Monthly report shall be submitted to top management of the subsidiary and CIL and Quarterly to company board. Action Plan for mine fire control shall be implemented. Monitoring will be done through Satellite Surveillance/other suitable technology.

g) Monitoring:

- I. All receptors in and around the mining projects shall be monitored regularly to assess the efficacy of the pollution control / mitigation measures within stipulated standards.
- II. Effect of mining on the hydrology of the area will be monitored through measurement of water level and its quality of nearby wells and bore holes provided for this purpose. Conservation of water through rainwater harvesting shall be taken up.
- III. Area and Unit environmental cells shall have regular interaction with the people in and around the coal mines and other allied units on matters related to environment to take necessary and timely corrective actions.
- V. Environmental initiatives and monitoring through self and third party environment audit shall be conducted for generating useful data for taking corrective actions and mitigation measures as per guidelines.

h) Other measures:

- I. Special emphasis shall be given to undertake R&D related to various facets of coal mine environmental management in collaboration with Central Mine Planning and Design Institute (CMPDI) and other competent institutions.
- II. Besides ensuring statutory compliance, the CIL desires to set high standards and continual improvement.
- III. A number of mines and establishments of CIL are ISO 14001 certified and balance mines & establishments shall be ISO 14001 certified in phased manner.
- IV. CSR and R&R policies of CIL are to be incorporated for better planning and implementation of the socio-economic issues of coal mining areas.
- V. The coal mining environmental issues are complex and require multi-disciplinary approach to address the same. CIL will endeavor to enter into MoUs with expert agencies of repute to assist in environment issues and also help in capacity building of CIL executives.
- VI. CIL conduct periodical medical examination (PME) of its work force on routine basis in compliance of the requirement mining rules and regulation, additional test will be done as and when require.

5. PRESERVATION OF BIO-DIVERSITY:

- a) This will start from mine planning including technically and biologically reclamation of mined out areas in collaboration with State Forest Departments, Wild Life Divisions, NGOs etc. working in the fields of bio- diversity conservation.

- b) The selection of species for plantation shall be done in consultation with the local community to include the local species and their preferences, if any.

6. COAL BENEFICIATION / COALWASHERIES:

- a) For beneficiation of Runoff Mines (ROM) coal, washeries are being set up in a phased manner as per requirement and statutes.
- b) Slurry Management System (SMS) in all washeries shall be organized to ensure collection of fines, gainful utilization of rejects viz. power generation in Fluidized Bed Combustion (FBC) plants, selling to brick manufacturers or adopting other environmental friendly disposal options as feasible.
- c) The reject dumps and tailings shall be suitably handled to avoid any contamination.
- d) The effluent from washeries including tailings pond shall be suitably treated and reused to minimize water consumption with zero discharge concept.

7. CONSERVATION AND CLEAN TECHNOLOGY:

- a) R&D projects shall be taken up to promote clean coal technology and improve the existing technologies.
- b) Energy saved is energy produced. Voluntary energy audit to be done for corrective action to reduce carbon footprint.
- c) Clean Development Mechanisms will be explored for reducing emission of Green House Gases by exploration, identification, preparation of projects reports for extraction of methane from Coal Bed, Coal Mine, Abandoned Mine, Ventilation Air, UG Coal Gasification, generation and utilization of renewable energy etc.

8. AWARENESS PROGRAMME:

- a) Publicity to generate awareness through exchange & communication of information, newsletters and periodicals on environment, seminars, work- shops, celebration of World Environment Day etc. at CIL / Subsidiary HQs, Areas & units to be undertaken. Regular training programs to be organized at various levels to inculcate awareness among employees.
- b) Courses on environmental and forestry laws and Environmental

Protection Measures and the Corporate Policy to be organized for project executives for improving knowledge.

- c) CIL to give annual awards for achieving excellence in environment related

issues and activities. These awards will be in recognition for implementation of EMP, land reclamation and compliance of statutes, proper maintenance of air & water quality and noise level.

9. WASTE MANAGEMENT:

CIL will undertake appropriate action for safe handling, storage and disposal of solid waste and hazardous waste generated from its industrial set up and colonies as per relevant rules. The biomedical waste generated from hospitals and dispensaries will be collected and disposed in appropriate facilities created as per statutes. E-waste management and handling of various types of e-waste generated in its operations will be done as per rule.

10. CORPORATE ENVIRONMENT RESPONSIBILITY:

Corporate Environment Responsibility (CER) is mandatory for issuing environmental clearance for all the Greenfield and Brownfield projects as per directives of MoEFCC with effect from 1st May, 2018 (O.M.No.22-65/2017- IAIII dt. 19.06.2018). Budgetary provisions should be kept for implementation of provisions of CER for all the projects which will be submitted to MoEFCC for grant of environmental clearance.

11. INCORPORATION OF VIEWS OF STAKEHOLDERS:

CIL will critically examine and incorporate the viewpoints of various stakeholders like PAPs/PAFs, Parliamentary Committees, Standing Sub-Committees, NGOs etc. CIL being a listed entity with stock exchange, it will also take into consideration the observations/viewpoints of international investors.

12. IMPLEMENTATION OF POLICY:

- i) **Manpower:** CIL shall have environmental divisions at decision making & operational levels in its structure. The environment department shall be set up and strengthened at:
- i) CIL Corporate HQ at Kolkata
 - ii) Subsidiary HQs
 - iii) Areas / Units / Collieries / Workshops /Washeries
 - iv) CMPDI (HQ) & CMPDI Regional Institutes

- ii) **Roles and Responsibilities:** The environmental department, set up at company HQs, Areas and Unit levels with appropriate manpower and resources, shall be responsible for implementation of policy, obtaining EC, FC, consent to establish

& operate, statutes requirements and undertaking mitigation measures besides preparation of action plan every year and also to intimate the status of implementation to the management regularly.

- iii) **Annual Environment Budget (Revenue &Capital):** The Annual Environment Budget (revenue & capital) shall be prepared based on the action plan including monitoring of various bench marks and the budget utilization. The year wise funds earmarked for environmental protection measures shall be kept in separate accounts with Environmental cost code.

13. FLEXIBILITY TO THE SUBSIDIARY COMPANIES:

CEP 2018 will be applicable for all subsidiaries of CIL. The subsidiary company Boards have been authorized to approve necessary modifications in CEP 2018 with reference to unique conditions prevailing at the concerned subsidiary.

REVIEW OF ENVIRONMENTAL POLICY:

In view of the present fast changing social, economic and environmental scenario, this Policy shall be reviewed every 5 years to incorporate the changes in the legal, technical, environmental, economic and social inputs prevailing at that time. Whenever, there is change in National Environmental Policy or other National / State relevant policies, Acts etc, this Corporate Environmental Policy would be reviewed and suitably revised.

(7)

Ph: 0326-2204933



झारखण्ड राज्य प्रदूषण नियंत्रण पर्वद्
Jharkhand State Pollution Control Board
HIG-1, Housing Colony, Dhanbad-826001

Letter No.....2650

Dated6/7/13.....

From,

Regional Officer,
Dhanbad

To,

HOD (Envt.),
M/s. B.C.C.L.,
Koyla Bhawan, Koyla Nagar,
Dhanbad.

Sub: **Fixing up monitoring station/Sampling location of Air, Water & Noise.**

Sir,

With reference to you letter no. GM(Envt.)/F-JSPCB/2013/783, dt. 06.07.2013 We have approved Air, Water & Noise monitoring Station/Sampling location after verification and return a copy of the map.

Encl-A/a.

Your's faithfully,


617113
(Dinesh Prasad Singh)
Regional Officer.

Memo.....

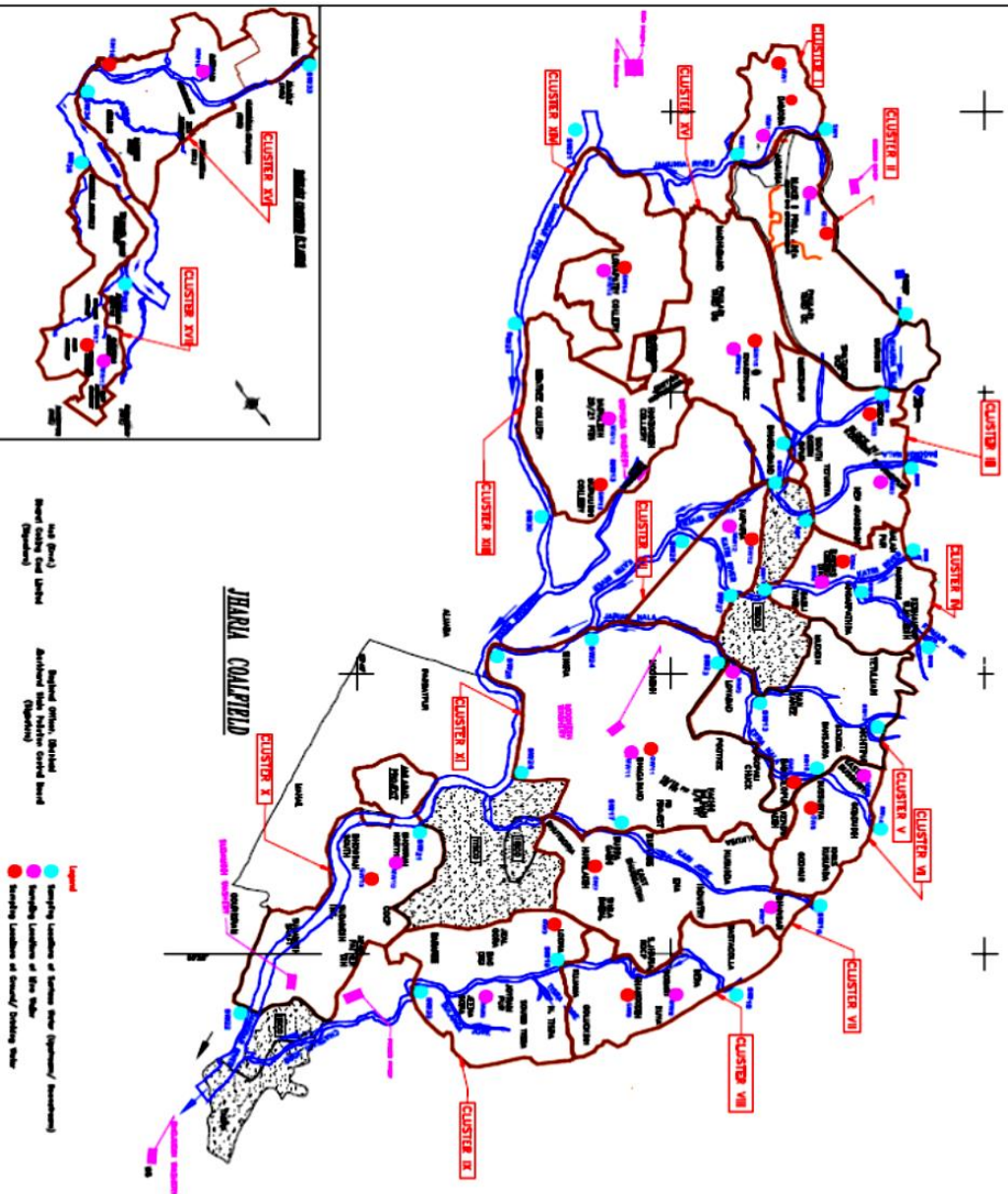
Dhanbad, dated.....

Copy to: The Member Secretary, Jharkhand State Pollution Control Board for information
& enclose a copy of the map for necessary action.

Encl-A/a.

(Dinesh Pd. Singh)
Regional Officer.

Water Sampling Locations in BCCL

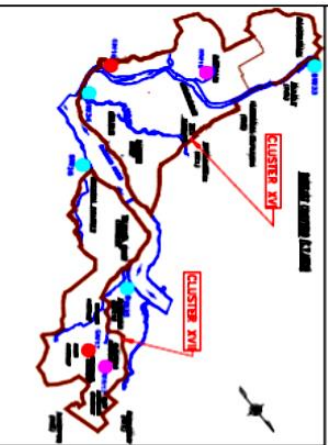


INDEX

Cluster	Sampling Location	Sampling Date	Sampling Time	Sampling Method	Sampling Result
I	...	...	...	...	...
II	...	...	...	...	...
III	...	...	...	...	...
IV	...	...	...	...	...
V	...	...	...	...	...
VI	...	...	...	...	...
VII	...	...	...	...	...
VIII	...	...	...	...	...
IX	...	...	...	...	...
X	...	...	...	...	...
XI	...	...	...	...	...
XII	...	...	...	...	...
XIII	...	...	...	...	...
XIV	...	...	...	...	...
XV	...	...	...	...	...
XVI	...	...	...	...	...
XVII	...	...	...	...	...
XVIII	...	...	...	...	...
XIX	...	...	...	...	...
XX	...	...	...	...	...

Legend

Symbol	Description
Red dot	Sampling location of surface water (river/stream)
Blue dot	Sampling location of groundwater
Yellow dot	Sampling location of surface water (lake/pond)
Green dot	Sampling location of groundwater (well)

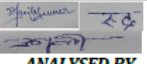
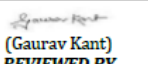


Location of Air & Noise Monitoring Stations in BCCL

BANK OF CHINA (UK) LIMITED		10.00	10.00
at 1000 sterling notes		1000	1000
sterling notes		1000	1000
TOTAL		1000	1000

  cmpdi A Mini Ratna Company										CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED Environment Laboratory, Regional Institute-II Ambient Air Quality Test Report				CMPDIL, RI-II KOYLA BHAWAN COMPLEX DHANBAD - 826005 Phone: 0326-223-850 email: rdr2cmpdi@coalindia.in	
Test Report for Ambient Air Samples										Report No.		RI-II/AIR/2022-23/12			
Month & Year		3/2023		Cluster		Cluster VII		Customer				Date of Issue		29.04.2023	
Project		Kusunda OCP		Sample Ref. No.		REM/BCCL/2023/12		Sampling Method		CMPDI/RI-II/LPM 13, (IS 5182)					
Date of Sampling		14.03.23		24.03.23		Period of Analysis		03.03.2023		10.04.2023		Zone of Station:		Core Zone	
Sl. No.	Parameter	Method Analysis	of	Observed Values (in $\mu\text{g}/\text{m}^3$)		Range Of Testing	LDL	MoEF Standards Notification dated 25 th September, 2000 (GSR 742 E)	NAAQS, 2009						
				1 st FN	2 nd FN										
S1	PM ₁₀	IS -5182(Part 23):2006, R-2017		94	96	10 $\mu\text{g}/\text{m}^3$ - 1000 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	300	100						
2	PM _{2.5}	IS -5182(Part 24):2019		51	52	10 $\mu\text{g}/\text{m}^3$ - 400 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	Not Specified	60						
3	SO ₂	IS-5182(Part-2): 2001, R-2017		<10	<10	10 $\mu\text{g}/\text{m}^3$ - 1050 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	120	80						
4	NO ₂	IS-5182 (Part-6): 2006, R-2017		33	34	06 $\mu\text{g}/\text{m}^3$ - 420 $\mu\text{g}/\text{m}^3$	06 $\mu\text{g}/\text{m}^3$	120	80						

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

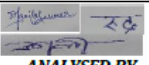
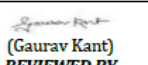
 ANALYSED BY	 REVIEWED BY (Gaurav Kant)	 Authorised Signatory (Amit Raj Mishra)
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--- End of Report ---
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  cmpdi A Mini Ratna Company										CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED Environment Laboratory, Regional Institute-II Ambient Air Quality Test Report				CMPDIL, RI-II KOYLA BHAWAN COMPLEX DHANBAD - 826005 Phone: 0326-223-850 email: rdr2cmpdi@coalindia.in	
Test Report for Ambient Air Samples										Report No.		RI-II/AIR/2022-23/12			
Month & Year		3/2023		Cluster		Cluster VII		Customer				Date of Issue		29.04.2023	
Project		Hurriladih UGP		Sample Ref. No.		REM/BCCL/2023/12		Sampling Method		CMPDI/RI-II/LPM 13, (IS 5182)					
Date of Sampling		10.03.23		28.03.23		Period of Analysis		03.03.2023		10.04.2023		Zone of Station:		Core Zone	
Sl. No.	Parameter	Method Analysis	of	Observed Values (in $\mu\text{g}/\text{m}^3$)		Range Of Testing	LDL	MoEF Standards Notification dated 25 th September, 2000 (GSR 742 E)	NAAQS, 2009						
				1 st FN	2 nd FN										
1	PM ₁₀	IS -5182(Part 23):2006, R-2017		97	92	10 $\mu\text{g}/\text{m}^3$ - 1000 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	300	100						
2	PM _{2.5}	IS -5182(Part 24):2019		55	54	10 $\mu\text{g}/\text{m}^3$ - 400 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	Not Specified	60						
3	SO ₂	IS-5182(Part-2): 2001, R-2017		<10	<10	10 $\mu\text{g}/\text{m}^3$ - 1050 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	120	80						
4	NO ₂	IS-5182 (Part-6): 2006, R-2017		28	30	06 $\mu\text{g}/\text{m}^3$ - 420 $\mu\text{g}/\text{m}^3$	06 $\mu\text{g}/\text{m}^3$	120	80						

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

 ANALYSED BY	 REVIEWED BY (Gaurav Kant)	 Authorised Signatory (Amit Raj Mishra)
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CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED
Environment Laboratory, Regional Institute-II
Ambient Air Quality Test Report

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

Test Report for Ambient Air Samples

Month & Year		2/2023	Cluster	Cluster VII			Report No.	RI-II/AIR/2022-23/11	
Customer		Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)					Date of Issue	31.03.2023	
Project		Kusunda OCP	Sample Ref. No.	REM/BCCL/2023/11		Sampling Method	CMPDI/RI-II/LPM 13, (IS 5182)		
Date of Sampling		10.02.2023	16.02.2023	Period of Analysis	01.03.2023	15.03.2023	Zone of Station:	Core Zone	
Sl. No.	Parameter	Method of Analysis	Observed Values (in $\mu\text{g}/\text{m}^3$)		Range Of Testing	LDL	MoEF Standards Notification dated 25 th September, 2000 (GSR 742 E)	NAAQS, 2009	
			1 st FN	2 nd FN					
S1	PM ₁₀	IS-5182(Part 23):2006, R-2017	98	96	10 $\mu\text{g}/\text{m}^3$ - 1000 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	300	100	
2	PM _{2.5}	IS-5182(Part 24):2019	58	59	10 $\mu\text{g}/\text{m}^3$ - 400 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	Not Specified	60	
3	SO ₂	IS-5182(Part-2): 2001, R-2017	<10	<10	10 $\mu\text{g}/\text{m}^3$ - 1050 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	120	80	
4	NO ₂	IS-5182 (Part-6): 2006, R-2017	30	29	06 $\mu\text{g}/\text{m}^3$ - 420 $\mu\text{g}/\text{m}^3$	06 $\mu\text{g}/\text{m}^3$	120	80	

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

Phileas

ANALYSED BY

Gaurav Kant
(Gaurav Kant)

(Gaurav Kant)
REVIEWED BY

(Amit Raj Mishra)

(Amit Raj Mishra)
Authorised Signatory

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Environment Laboratory, Regional Institute-II
Ambient Air Quality Test Report

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

Test Report for Ambient Air Samples

Test Report for Ambient Air Samples									
Month & Year		2/2023	Cluster	Cluster VII				Report No.	RI-II/AIR/2022-23/11
Customer		Environment Department, Bharat Coking Coal Limited (BCL), Koyla Bhawan, Dhanbad (E-mail: gmeenv.bcl@coalindia.in)						Date of Issue	31.03.2023
Project		Hurriladih UGP	Sample Ref. No.	REM/BCL/2023/11		Sampling Method		CMPDI/RI-II/LPM 13, (IS 5182)	
Date of Sampling		05-02-2023	16-02-2023	Period of Analysis	01.03.2023	15.03.2023	Zone of Station:	Core Zone	
Sl. No.	Parameter	Method of Analysis	Observed Values (in $\mu\text{g}/\text{m}^3$)		Range Of Testing	LDL	MoEF Standards Notification dated 25th September, 2000 (GSR 742 E)	NAAQS, 2009	
			1st FN	2nd FN					
1	PM ₁₀	IS -5182(Part 23):2006, R-2017	92	84	10 $\mu\text{g}/\text{m}^3$ - 1000 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	300	100	
2	PM _{2.5}	IS -5182(Part 24):2019	49	45	10 $\mu\text{g}/\text{m}^3$ - 400 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	Not Specified	60	
3	SO ₂	IS-5182(Part-2): 2001, R-2017	<10	<10	10 $\mu\text{g}/\text{m}^3$ - 1050 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	120	80	
4	NO ₂	IS-5182 (Part-6): 2006, R-2017	27	26	06 $\mu\text{g}/\text{m}^3$ - 420 $\mu\text{g}/\text{m}^3$	06 $\mu\text{g}/\text{m}^3$	120	80	

* LDL indicates Lower Detection Limit.

****All units are in $\mu\text{g}/\text{m}^3$, 24 hourly Average.**

Phileas
20

ANALYSED BY

Gaurav Kant
(Gaurav Kant)

(Gaurav Kant)
REVIEWED BY

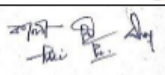
(Amit Raj Mishra)

(Amit Raj Mishra)
Authorised Signatory

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  cmpdi A Maiti Ratna Company		CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED Environment Laboratory, Regional Institute-II GROUND WATER ANALYSIS TEST REPORT			CMPDIL, RI-II KOYLA BHAWAN COMPLEX DHANBAD. -826005 Phone:0326-223-850 mail: rdri2cmpdi@coalindia.in		
Month & Year	QUARTER ENDING DEC 2022	Cluster	CLUSTER VII			Report No.	RI-2/GW/22-23/QE/03
Customer	Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)					Date of Issue	16.03.23
Project	Hurriladih	Sample Ref. No.	REM/BCCL/22-23/GW	Sampling Method	CMPDI/RI-II/LPM 13.(IS 3025:Part -1)		
Sampling Stations	Hurriladih	Date of Sampling	14.11.2022	Sample Collected in 5 Ltr Jerrycane, Color as observed is transparent			
		Period of Analysis		Nov 22	Jan 23		
Sl. No.	Parameter	Method of Analysis	Observed Values			IS 10500: 2012	
			GW7	Range Of Testing	LDL	Acceptable Limit (Max)*	Permissible Limit in the Absence of Alternate Source (Max)
1	Colour, Hazen unit	APHA, 23 rd Edition, 2120-c Spectrophotometric Single Wavelength Method, 2017	3	1-500.0	1	5	15
2	Calcium, mg/l	IS 3025, (Part 40): 1991 R:2019, AAS-Flame Method & EDTA Method	23	2.0-800.0	2	75	200
3	Chlorides, mg/l	IS-3025(Part 32):1988, R-2019, Argentometric Method	81	2.0-1500.0	5	250	1000
4	Fluoride, mg/l	APHA, 23 rd Edition, SPADNS Method	0.71	0.2-2.00	0.2	1	1.5
5	Iron, mg/l	IS 3025 (Part 53): 2003, R: 2019, AAS-Flame Method	1.18	0.2-10	0.2	1	No relaxation
6	Magnesium	APHA 23 rd Edition, 3500-Mg B: Calculation Method	148	6.0-700	6	30	100
7	Nitrate, mg/l	APHA, 23 rd Edition, UV-Spectrophotometric Method	22.97	0.5-45.0	0.5	45	No relaxation
8	Odour	APHA, 23 rd Edition, 2150-C	Agreeable	Qualitative	Qualitative	Agreeable	Agreeable
9	pH value	IS 3025, Part 11: 1983 R 2017 Electrometric (pH Meter) Method	8.05	1-14	0.1	6.5-8.5	No relaxation
10	Sulphate, mg/l	APHA -23 rd Edition, 4500 S, Turbidity Method	273	10.0-400.0	10	200	400
11	Taste	APHA, 23 rd Edition, 2160-C	Acceptable	Qualitative	Qualitative	Acceptable	Agreeable
12	Total Alkalinity (CaCO ₃), mg/l, Max	IS 3025, Part 23: 1986 R 2019 Titration Method	380	4.0-2000.0	4	200	600
13	Total Dissolved Solids, mg/l	IS 3025, Part 16: 1984 R 2017 Gravimetric method	844	25.0-5000.0	25	500	2000
14	Total Hardness, mg/l	IS 3025, (Part 21): 2019 EDTA Method	667	4.0-2000.0	4	200	600
15	Turbidity, NTU	IS 3025, (Part 10):1984, R-2017 Nephelometric/Turbidimetric Method	1.6	1-800	0.1	1	5
16	Zinc, mg/l	IS 3025(Part 49): 1994,R:2019, AAS-Flame Method	0.23	0.1 - 2.0	0.1	5	15
***All units in mg/L unless specified otherwise,							
**Grab sampling carried out for water samples. *LDL indicates Lower Detection Limit & BDL indicates Below Detection Limit,							
 ANALYSED BY		 (Kumar Vaibhav) CHECKED BY		 (Amit Raj Mishra) HOD's Signature			
Note: The results above relate to the samples tested as received. This report can not be reproduced in part or full without the written permission of the HOD(Env), CMPDI, RI-II.							
Page -1 of 2							
---- End of Report ----							

	भारत कोकिंग कोल लिमिटेड 'एक मिनीरल कम्पनी' (कोल इण्डिया लिमिटेड का एक अंग)	
पर्यावरण विभाग, कोयला भवन		
सभी संबंधित व्यक्तियों को सूचित किया जाता है कि भारत कोकिंग कोल लिमिटेड के वलस्टर VII कोयला खनन परियोजना को पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय के द्वारा पर्यावरणीय स्वीकृति में संशोधन दिया गया है जो इस प्रकार है :-		
क्रम संख्या	परियोजना का नाम	स्वीकृति पत्र संख्या एवं दिनांक
1.	धनबाद जिला, झारखण्ड में स्थित भारत कोकिंग कोल लिमिटेड के वलस्टर VII कोयला खनन परियोजना की पर्यावरण स्वीकृति जिसका कुल क्षेत्र 2127.70 हेक्टेयर है एवं उत्पादन क्षमता 11.42 मिलियन टन प्रति वर्ष है को संशोधित किया गया है जिसमें राजापुर/द-झरिया ओसीपी परियोजना की पीक उत्पादन क्षमता 2.56 एमटीपीए की गयी है पर वलस्टर VII की उत्पादन क्षमता 11.42 मिलियन टन प्रति वर्ष यथावत है।	J-11015/238/ 2010-IA-II (M) Pt. दिनांक 20 अगस्त 2020
पर्यावरणीय स्वीकृति प्रतिलिपि झारखण्ड राज्य प्रदूषण नियंत्रण बोर्ड के पास उपलब्ध है तथा इसे पर्यावरण एवं वन मंत्रालय की अधिकारिक वेबसाइट http://envfor.nic.in और भारत कोकिंग कोल लिमिटेड के आधिकारिक वेबसाइट http://www.bcclweb.in पर देखा जा सकता है।		
हो/- विभागाध्यक्ष (पर्यावरण), कोयला भवन		



Picture 1 – Covered Transportation



Picture 2 – Water Sprinkling on Transportation Road



Dhanbad, Jharkhand, India



Longitude Latitude
86.4098° E 23.7752° N



36° C

Tuesday, 26, Jul, 2022

10:20 AM



Picture 3 – Manual Sweeping of Public Road



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:	Cluster Vii Group Of Mines Of Bccl		
Project Address:	Office Of The General Manager, Kusunda Area, Bccl		
Town:	Dhanbad (m Corp.)	Block:	Dhanbad
District:	Dhanbad	State:	Jharkhand
Pin Code:			
Communication Address:	Office Of The General Manager, Kusunda Area, Bccl, Dhanbad, Dhanbad, Jharkhand - 828116		
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/ORIG/2021/13617		
2. Application No.:	21-4/274/JH/MIN/2018	3. Category:	Semi Critical
4. Project Status:	Existing Project	5. NOC Type:	New
6. Valid from:	02/11/2021	7. Valid up to:	01/11/2023
8. Ground Water Abstraction Permitted:			

Picture 4 – Ground Water NOC Cluster VII



Picture 5 – Training at Vocational Training Centre



Picture 6 – Spreading Seed Ball on OB Dumps



Picture 7 – Enclosed Coal Handling Plant



Picture 8 – Top Soil Stack



Picture 9 – Green Belt Development along Railway Siding



Picture 10 – Oil & Grease Trap



Picture 11 – Grassing on active OB Dumps



Picture 12 – Piezometer well



Picture 13 – Skill training to PAPs