

केवल नागपुर कोर्ट के अधिकार क्षेत्र मे

Under Jurisdiction of Nagpur Court only



**वेस्टर्न कोलफील्ड्स लिमिटेड/Western Coalfields Limited**

मिनिरात कम्पनी (A Miniratna Company)

कोल इंडिया लिमिटेड की अनुषंगी कम्पनी (A Subsidiary of Coal India Limited)

**CIN-U10100MH1975GOI018626**



उपक्षेत्रीय प्रबंधक कार्यालय, अम्बाडा उपक्षेत्र, कन्हान क्षेत्र  
पता: गुढी, अम्बाडा पो:पालाचौरड, जिला:छिन्दवाड़ा (म.प्र.)  
पिन:480449

Email: [wclambarasubarea@gmail.com](mailto:wclambarasubarea@gmail.com)

Office of The Sub Area Manager, Ambara Sub Area, Kanhan Area

Address: Gudhi Ambara, PO: Palachouri, Dist: Chhindwara, M.P. PIN: 480449

Phone: 7587595600

07160-268023(O), 268029(R)

संदर्भ:- पत्र कं. वेकोलि/कन्हान/अ.स./उ.क्षे.प्र/35/2026-158

दिनांक 25.05.2026

प्रति,

1. Regional Officer,  
Integrated Regional Officer(Bhopal), MOEF&CC,  
Kendriya Paryavarn Bhavan, Link Road No.3,  
E-5, Ravishankar Nagar, Bhopal-462016(M.P)

2. Director (Monitoring Cell), MOEF&CC,  
Indira Paryavarn Bhayan, Jorbag Road, Aligunj,  
New Delhi-110003

विषय: Submission of Six Monthly EC Compliance Report of Mohan(Maori) UG Mine (EC letter no J-11015/123/2008-IA.II(M) dated 02.02.2009 For production Capacity 1.0 MTPA in Area of 800 HA) for the period of Oct-2025 to March 2026 .

महोदय,

Reference to the above subject, please find enclosed herewith Six Monthly EC Compliance Report of Mohan(Maori) UG Mine of Kanhan Area, WCL for the period of Oct-2025 to March 2026 for kind perusal.

उपक्षेत्रीय प्रबंधक  
अंबाडा उपक्षेत्र

प्रतिलिपि:

1. महाप्रबंधक (माइनिंग) /विभागाध्यक्ष (पर्यावरण) वेकोलि मुख्यालय, नागपूर
2. क्षेत्रीय महाप्रबंधक, कन्हान क्षेत्र
3. क्षेत्रीय नोडल अधिकारी (पर्यावरण), कन्हान क्षेत्र

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DAY



# **SIX MONTHLY COMPLIANCE REPORT OF ENVIRONMENTAL CLEARANCE**

**MOHAN (MAORI) UG MINE**

**(1.00 MTPA IN AREA OF 800 HA)**

**EC NO. - J-11015/123/2008-IA-II(M)**

**DATED 02.02.2009**



**WESTERN COALFIELDS LIMITED**

**KANHAN AREA**

**PO: DUNGARIA, CHHINDWARA (MP)-480553**

**PERIOD OCTOBER 2025 TO MARCH 2026**

# Western Coalfields Ltd.



Present Status  
Kanhana Area  
**Mohan U/G**  
(1.0 MTPA)

Sl.No	Contents
1.	Data Sheet
2.	EC Letter (Expn 0.45 to 1.00 MTPA)
3.	Implementation of Environmental Clearance Condition
4.	Letter to Sarpanch (0.45 to 1.00 MTPA)
5.	Newspaper publication (0.45 to 1.00 MTPA)
6.	Accreditation Certificate Environmental Laboratory
7.	Environmental Management at Mohan UG mine-Air Pollution & Water Pollution Control Measures
8.	Consent to Operate (CTO) document
9.	Production Data
10.	Environment Monitoring Reports for the period Oct. 25 to Mar.26
11.	Groundwater Monitoring Reports for the period Oct. 25 to Mar.26
12.	Copy of approval letter & copy of Approved Mine Closure Plan



		<p>MPPCB on 02.05.02</p> <p>iii) Environment Clearance for 0.45 MTY coal production issued by MOEF vide letter No J-11015/238/2005 IA.II (M) Dt:17.10.2006 and for 1.00MTY vide letter no. J-11015/123/2008-IA.II(M) dt.02.02.2009</p> <p>a) Air Pollution Control measures</p> <ul style="list-style-type: none"> <li>• Plantation in and around mine lease area</li> <li>• Water spraying on coal transportation road</li> <li>• RCC road provided to suppress dust.</li> <li>• Regular air quality monitoring is being done</li> </ul> <p>b) Water Pollution Control Measures</p> <ul style="list-style-type: none"> <li>• Sedimentation tank &amp; filterplant provided.</li> </ul> <p>c) Noise Pollution Control Measures</p> <ul style="list-style-type: none"> <li>• Regular Maintenance of Machineries &amp; Equipments.</li> <li>• Development of green belt in between industrial complex &amp; residential area</li> <li>• Ear plugs &amp; helmets to the workers.</li> </ul> <p>d) Control of ground water depletion</p> <ul style="list-style-type: none"> <li>• Roof Top rainwater harvesting structure constructed at Ambara Community Hall.</li> </ul> <p>e) Disaster Management Plan</p> <ul style="list-style-type: none"> <li>• Emergency Response Plan for ensuring safety against any disaster/accidents.</li> </ul> <p>f) Progressive Mine closure Plan</p> <p>g) Monitoring &amp; Management organization: for Smooth Working&amp; handling of environment related jobs following organization is proposed.</p>		
		S.N	Measures/ Action	
		1	Environmental Control	Agency/Responsibility 1 General Manager, Kanhan Area 2. GM(O) Kanhan Area 3.Nodal officer (Env), KA 4. Sub Area Manager, Moari UG 5.Staff Officer (Civil), KA 6. Environmental Cell (WCL H.Q)

		2.	Environmental Monitoring & Control at Area Level	<p>1 General Manger Kanhan Area  2. G.M.(O) Kanhan Area  3.Staff officer (Civil)Kanhan Area  4. .Nodal officer (Env), K. A.  5. Sub Area Manager Moari UG  6. Environmental Cell (WCL HQ)  7. Environmental Laboratory of CMPDI RI-IV</p>
			At unit level	<p>1. Sub Area Manager, Maori UG  2. Manager, Maori UG mine  2. Nodal officer (Env), Ambara Sub Area</p>
7.	Break-up of the project Area A. Submergence area : forest & non- forest .Others	Not Applicable		
8.	Beak up of the project affected population with enumeration of those losing house/dwelling units only agricultural land only both dwelling units & agricultural land & landless laborers /artisans a) SC, ST/ Divas b) Others (Please Indicate Whether these figures are based on any scientific and systematic surrey carried out or only provisional figures, if a survey is carried out give details & year of survey)	Existing Mine, land already in possession hence not applicable		
9.	Financial Details a) Project cost as originally planned& subsequent revised estimate and the year of price reference b) Allocation made for environmental management plans with item wise r& year wise brake up c) Benefit Cost ratio /Internal rate of items of refund & year of assessment d) Whether includes the cost of environmental management as shown in above e) Actual expenditure incurred on the environmental management plans so far	Project Cost - Rs. 900 lakh Details of Expenditure on environmental management plans in last 3 years. Details also given in Part - III		

10	<p>Forest land requirement</p> <p>a) The status of approval for diversion of forest land for non-forestry land</p> <p>b) The status of clearing /felling</p> <p>c) The status of compensatory afforestation ,if any</p> <p>d) Comments on the viability &amp; sustainability of compensatory afforestation program in the light of actual field experience so far</p>	The mine is an old mine, taken over since nationalization. Forest Clearance for surface infrastructure of the mine has been obtained.			
11	The status of clear felling in non –forest areas (such as submergence area of reservoir, approach road etc) if any with quantitative information required	Existing mine already commenced. Mohan (Moari ) U/G is running mine since 1975 (taken over mine & operated target capacity 0.45 MTYsince 01.01.97)			
12	<p>Status of construction (Actual &amp; or planed )</p> <p>a) Date of commencement (Actual &amp; or planed)</p> <p>b. Date of completion (Actual &amp; or planed )</p>	Not Applicable			
13	Reason for delay ,if project is yet to start	Not Applicable			
14	<p>Date of site visit</p> <p>a) Date on which the project was monitored by the Regional office on previous occasions if any site visit</p> <p>b) Date of site visits for this Monitoring report</p>	Mine is periodically inspected by MPPCB officials			
15	<p>Details of corresponding with project authorities for obtaining act on plans /information on status of compliance to safeguards other than the routine letters for logistic support for site visits )</p> <p>(The first monitoring report may contains the details of all the letter issued so far ,but the later report may cover only the letter issued subsequently )</p>	Noted			
		<b>Head</b>	<b>2023-24 (in lakhs)</b>	<b>2024-25 (in lakhs)</b>	<b>2025-26 (in lakhs)</b>
		1.Afforestation (Maintenance of plantation etc.	--	-	--
		2. Air, water, noise quality monitoring	35.83	20.64	21.06
		3. Water Cess/Payment to CGWA for obtaining NOC	4.25	---	4.25
		4. Consent Fee	32.00 (For two years upto 31/10/2025)		32.00
		5. Water Sprinkling	2.51	--	
		<b>Total</b>	<b>74.59 lakhs</b>	<b>20.64</b>	<b>57.31</b>

**WESTERN COALFIELDS LIMITED**  
**Six Monthly Environmental Monitoring Report**  
**Project of Kanhan Area for the period Oct'25-Mar'26**  
**Mohan/(Maori)UG**

**Part –I**

Name of the project	Mohan (Moari) U/G
Location & Address	Kanhan Area ( WCL) Near Ambara Village Teh: Parasia, Dist.-Chhindwara M.P
Address for Corresponding Ambara Sub Area	Near Ambara Sub Area, Ambara Village Teh: Parasia, Dist.-Chhindwara M.P
MOEF's Clearance Letter No. & Date	J-11015/238/2005-IA II( M) Dt:-17.10.2006 (0.45MTY) J-11015/123/2008-IA.II(M) dt. 2.02.2009 (1.00 MTY)
Period of Status Report	Oct. 2025 to Mar. 2026
Date of Commencement of Project work	01.01.97

**Status of Land Acquisition:-**

Type of Land	Required as per EMP (Ha)	Actual acquired (Ha) as on
Forest	551.676	Lease obtained under MCR and is valid till 31.03.2030
Agriculture	232.764	
Other (Government land)	15.560	
Total	800.00	

\* This is total lease hold area 800 Ha. of the mine covered under Mining Right / MCR lease .Lease valid till 31.03.2030. Since it is an underground mine, taken over after Nationalization essential surface land for mine entries an infrastructure for 9.87 Ha. Already acquired Under C.B. Act Mohan (Maori) Project is being used.

**Status of Consent to Operate:-**

a. Consent under water (prevention and Control of Pollution ) Act	Consent no. AW 63351 dated 14/11/2025 valid upto 31/10/2027
b. . Consent under Air (prevention and Control of Pollution ) Cess Act	Consent no. AW 63351 dated 14/11/2025 valid upto 31/10/2027
c. Environment (Protection) Act	Environment statement for 2024-25 submitted online via xgn portal.

**Part: II**  
**Status of Environmental Monitoring**

a. No Ambient Air Monitoring stations	Four Nos.
b. Name of Location (*) :-	1) SAM's Office - Ambara 2) Pit Office (Mohan) 3) Colony 4) Ambara Village
c. Ambient Air Quality Status for the parameters prescribed by status Pollution Control boards (average 95 % time weighted Values)**	Monitoring reports enclosed for period Oct.'25 to Mar'2026

**Water pollution control:-**

- a. No. of stations and frequency of monitoring :-there is only one station i.e. Mine discharge point and frequency of monitoring is once in a fortnight as per GSR 742 (E).
- b. Description of location (\*) :-Mine water discharge is monitored during operational stage of the mine. Quantity of effluent discharged to local water course from each source in cubic meter per day: - nil

**Noise pollution Control:-**

- a. No. of noise monitoring stations: - 2 (Two)
- b. Description of location (\*) and db (a) value \*\*: -

1. Near fan house
2. Colony

(\*) location of sampling stations are to be delineated on the working mine plan.

\*\* Detailed report monitoring of noise as per statute to be enclosed

### Part –III

#### Status of Implementation of Provision of EMP

##### Land use Status:-

S.N	Particulars	As per EMP	Current Year	Progressive
1)	Area excavated (ha)	NA	Not applicable as this is an U/G mine	
2)	Top soil removed	NA	Not applicable as this is an U/G mine	
3)	OB removed	NA	Not applicable as this is an U/G mine	
4)	OB backfilled	NA	Not applicable as this is an U/G mine	
5)	OB Dumped (mm3)	NA	Not applicable as this is an U/G mine	
6)	Area recovered for Reclamation ( Physical Reclamation)	NA	Not applicable as this is an U/G mine	
	Area reclaimed biologically (Tree plantation on backfilled area)	NA	Not Applicable as this is an U/G mine	

##### Production:-

- 1) Targeted Capacity 0.45 MTPA (EC obtained for 1.00 MTPA)
- 2) Present Capacity 0.45 MTPA

##### Afforestation :-

Area Under plantation (Progressive): 81500 plants over an area of 32 Ha.

Nos of plants per hectare : 2500 per Ha.

Species Planted :Karonj ,Neem, Jamun,Casia, Acasia, Imli, Silver Oak, Babool, Gulmohar etc.

##### Rehabilitations &Resettlement:-

It is old working mine, operational prior to nationalization. Hence R&R is not applicable.

**Expenditure:****Capital Account Head during FY 2025-26:**

Particular	Current	Progressive
Reclamation	NIL	NIL
Air Pollution Control	NIL	NIL
Water Pollution Control	NIL	NIL
Others	NIL	NIL

**Revenue Head.- During last 03 years:**

Heads	During 2023-24	During 2024-25	During 2025-26
1) Env. monitoring	35.83 lakhs	20.64 lakhs	21.06
2) Water Cess/Obtaining NOC from CGWA	4.25 lakhs		4.25
3) Consent fees	32 lakhs for two years upto 31/10/2025		32.00
4) Water Sprinkling	2.51 lakhs		
Total	74.59 lakhs		57.31

**Organizational Setup Project Level:-**

Shri.Narendra Kumar Soni SAM/Agent  
Shri Rajesh Thakur Colliery Manager  
Shri Rajesh Thakur Colliery Manager/NO(Env.)

Ambara Sub Area  
Mohan U/G  
Mohan U/G

No.J-11015/123/2008-IA.II(M)  
 Government of India  
 Ministry of Environment & Forests

Paryavaran Bhawan,  
 C.G.O.Complex, Lodi Road,  
 New Delhi - 110510

Dated: 2<sup>nd</sup> February 2009

To  
 M/s Western Coalfields Ltd.,  
 Coal Estate, Civil Lines,  
 NAGPUR – 440001.

**Mohan (Maori) Underground Coal Mine Expansion Project (production from 0.45 MTPA to 1 MTPA of M/s Western Coalfields Ltd. (WCL), located near village Ambara, Tehsil Junardeo, District Chindwara, Madhya Pradesh - environmental clearance – reg.**

Sir,

This has reference to letter No. 43011/10/2007-CPAM dated 28.02.2008 of Ministry of Coal forwarding your application for TOR, which was withdrawn vide WCL letter dated 23.05.2008 and a revised application of MOC dated 13.06.2008 read with WCL letter dated 17.06.2008 for environmental clearance u/s 7 (ii) of the EIA Notification 2006 and subsequent letters dated 19.11.2008, 13.01.2009 and 15.01.2009 on the above-mentioned subject. The Ministry of Environment & Forests has considered your application. The proposal is for **expansion in production in Mohan (Maori) Underground Coal Mine from 0.45 million tonnes per annum (MTPA) to 1 MTPA with no change in lease area of 800 ha.** EC was granted on 17.10.2006 for 0.45 MTPA production capacity over an ML area of 800 ha. Of the total lease area of 800 ha, 232.764 ha consists of agricultural land, 551.676 ha is forestland and 15.56 ha is Government land. Forestry clearance has been applied for. The project does not involve R&R. There are no National Parks, Wildlife Sanctuary, Biosphere Reserves found in the 15 km buffer zone. Of the total lease area, 798.13 ha under Mining Rights and 9.87 ha under surface rights. The project does not involve modification of the natural drainage. Mining will be underground by Bord & Pillar method involving continuous miner. Mineral transportation of 1500 TPD of coal is by road to Palachauri Railway siding a distance of 1.5 km. Ultimate working depth of the mine is 266 below ground level (bgl). Mining has intersected water table, which is in the range of 5m–12m bgl during pre-monsoon and 2.5 m– 7m during post-monsoon. Average water requirement is 240m<sup>3</sup>/d, which is to be met from mine water discharge. Balance life of the mine at the proposed rated capacity is 15 years. Public Hearing was held on 12.02.2002 for 0.45 MTPA project. The project has been approved by M/s WCL on 13.01.2009. There is no additional capital investment for the expansion project. Original capital cost of the project is Rs. 900 lakhs.

2. The Ministry of Environment & Forests hereby accords environmental clearance for the above-mentioned Mohan (Maori) Underground Coalmine Expansion Project of M/s WCL for expansion in production of coal from 0.45 MTPA to 1 MTPA rated capacity involving a total lease area of 800 ha under the provisions of the Environmental Impact Assessment Notification, 2006 and subsequent amendments and Circulars thereto and subject to conditions specified below:

**A. Specific Conditions**

- (i) No mining shall be undertaken in the forestland for which forestry clearance has not been obtained.
- (ii) Regular monitoring of subsidence movement on the surface over and around the working area and impact on natural drainage pattern, water bodies, vegetation, structure, roads, and surroundings shall be continued till movement ceases completely. In case of observation of any high rate of subsidence movement, appropriate effective corrective measures shall be taken to avoid loss of life and material. Cracks shall be effectively plugged with ballast and clayey soil/suitable material.
- (iii) High root density tree species shall be selected and planted over areas likely to be affected by subsidence.

Coal Extraction shall also be optimised in areas where agricultural production is continuing. Some pillars shall be left below the agricultural land. No coal depillaring shall be undertaken below areas of habitation.

- (v) Subsidence shall be monitored closely and if subsidence is found exceeding the permitted limits, then the landowners shall be adequately compensated with mutual agreement of the landowners.

Garland drains (size, gradient and length) around the safety areas such as mine shaft and low lying areas and sump capacity shall be designed keeping 50% safety margin over an above the peak sudden rainfall and maximum discharge in the area adjoining the mine sites. Sump capacity shall also provided adequate retention period to allow proper settling of silt material.

- (vi) Water sprinkling system shall be provided to check fugitive emissions from loading operations, conveyor system, haulage roads, transfer points, etc. Mobile sprinklers shall be provided in major haul roads and with high levels of SPM/RSPM.

- (vii) Major approach roads shall be black topped and properly maintained.

- (ix) Drills shall be wet operated only to avoid fugitive dust emissions.

- (x) A progressive afforestation plan shall be prepared and implemented over the mine lease area and shall include areas under green belt development, areas along roads, infrastructure, along ML boundary and township outside the lease areas, etc, by planting native species in consultation with the local DFO/Agriculture Department. The density of the trees shall be around 2500 plants per ha.

- (xi) Regular monitoring of groundwater level and quality shall be carried out by establishing a network of existing wells and construction of new peizometers. The monitoring for quantity shall be done four times a year in pre-monsoon (May), monsoon (August), post-monsoon (November) and winter (January) seasons and for quality in May. Data thus collected shall be submitted to the Ministry of Environment & Forests and to the Central Pollution Control Board quarterly within one month of monitoring.

- (xii) The Company shall put up artificial groundwater recharge measures for augmentation of groundwater resource. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.

- (xiii) Mine discharge water particularly TDS shall be treated to conform to prescribed levels

before discharge into the natural environment.

- (xiv) Besides carrying out regular periodic health check up of their workers, 10% 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, through an agency such as NIOH, Ahmedabad within a period of one year and the results reported to this Ministry and to DGMS.

For monitoring land use pattern and for post mining land use, a time series of landuse maps, based on satellite imagery (on a scale of 1: 5000) of the core zone and buffer zone, from the start of the project until end of mine life shall be prepared once in 3 years (for any one particular season which is consistent in the time series), and the report submitted to MOEF and its Regional office at Bhopal

- (xv) A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval

## **B. General Conditions**

- (i) No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment and Forests.

- (ii) No change in the calendar plan including excavation, quantum of mineral coal and waste shall be made.

- (iii) Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring SPM, RSPM, SO<sub>2</sub> and NO<sub>x</sub> and heavy metals such as Hg, As, Ni, Cr, etc. 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.

- (iv) Data on ambient air quality (SPM, RSPM, SO<sub>2</sub> and NO<sub>x</sub> and heavy metals such as Hg, As, Ni, Cr, etc) shall be regularly submitted to the Ministry including its Regional Office at Bhopal and to the State Pollution Control Board and the Central Pollution Control Board once in six months.

- (v) Fugitive dust emissions (SPM and RSPM and heavy metals such as Hg, As, Ni, Cr, etc) from all the sources shall be controlled regularly monitored and data recorded properly. Water spraying arrangement on haul roads, wagon loading, dump trucks (loading and unloading) points shall be provided and properly maintained.

- (vi) Adequate measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with ear plugs/muffs.

- (vii) Industrial wastewater (workshop and wastewater from the mine) shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19<sup>th</sup> May 1993 and 31<sup>st</sup> December 1993 or as amended from time to time before discharge. Oil and grease trap shall be installed before discharge of workshop effluents.

- (viii) Environmental quality monitoring (air, water, soil) shall also include random verification of samples through analysis from independent laboratories recognised under the E(P)A Rules, 1986 and shall be

furnished as part of the Report.

(ix) Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transporting the mineral shall be covered with tarpaulins and optimally loaded.

(x) Environmental laboratory shall be established with adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board.

(xi) Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects.

Occupational health surveillance programme of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures, if needed.

(xii) A separate environmental management cell with suitable qualified personnel shall be set up under the control of a Senior Executive, who will report directly to the Head of the company.

(xiii) The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to this Ministry and its Regional Office at Bhopal.

(xiv) The Regional Office of this Ministry located at Bhopal shall monitor compliance of the stipulated conditions. The Project authorities shall extend full cooperation to the office(s) of the Regional Office by furnishing the requisite data/ information/monitoring reports.

(xv) A copy of the will be marked to concerned Panchayat/ local NGO, if any, from whom any suggestion/representation has been received while processing the proposal.

(xvi) State Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District Industry Centre and Collector's Office/Tehsildar's Office for 30 days.

(xvii) The Project authorities shall advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within seven days of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution control Board and may also be seen at the website of the ministry of Environment & Forests at <http://envfor.nic.in>. The compliance status shall also be uploaded by the project authorities in their website and updated at least twice in a year so as to bring the same in the public domain. The data shall also be displayed at the entrance of the project premises and mines office and in corporate office.

3. The Ministry or any other competent authority may stipulate any further condition for environmental protection.

4. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract the provisions of the Environment (Protection) Act, 1986.

5. The above conditions will be enforced *inter-alia*, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and Rules. The proponent shall ensure to undertake and provide for the costs incurred for taking up remedial measures in case of soil contamination, contamination of groundwater and surface water, and occupational and other

diseases due to the mining operations.

(Dr. T.Chandini)  
Director

**Copy to:**

1. Secretary, Ministry of Coal, Shastri Bhawan, New Delhi
2. Secretary, Department of Environment & Forests, Government of Madhya Pradesh, Secretariat, Bhopal
3. Chief Conservator of Forests, Regional office (EZ), Ministry of Environment & Forests, E-2/240 Arera Colony, Bhopal – 462016.
4. Chairman, Madhya Pradesh State Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony, Bhopal – 462016.
5. Chairman, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, New Delhi -110032.
6. Member-Secretary, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi
7. Shri M.K. Shukla, CGM, Coal India Limited, SCOPE Minar, Core-I, 4th Floor, Vikas Marg, Laxminagar, New Delhi
8. District Collector, Chindwara, Government of Madhya Pradesh, New Delhi
9. Monitoring File      10. Guard File      11. Record File

(Dr. T.Chandini)  
Director

**Name of Project:-Mohan (Maori) Under Ground Coal Mine  
Expansion Project (0.45 MT to 1.00 MTPA)**

**MOEF Environmental Clearance Letter No.J 1105/238/2005-IA.(II) Dated.-02.02.2009  
Status of Implementation of Environmental Clearance conditions**

S NO	Condition	Remarks/ Action
<b>A)</b>	<b>Specific Conditions</b>	
I	No Mining operation shall be undertaken in the forest land until clearance under provision of FC Act 1980	Noted for Compliance. Forest Clearances received from MOEFCC vide 8-133/2006-FC dated 17.07.2008 and 8-113/2011-FC dated 02.07.2015
II	Regular Monitoring of subsidence movement on the surface over & around the working area and impact on Natural drainage pattern, water bodies, vegetation, structures, roads, and surroundings should be continued till movement ceases completely. In case of observation of any high rate of subsidence should be taken to avoid loss of life and material. Cracks should be effectively plugged with ballast and clayey soil/suitable material.	Subsidence is being monitored regularly and till date no subsidence on the surface has been observed. Depillaring is carried out as per DGMS guidelines and records of the same are maintained. The depillaring operation is started after taking due permission from DGMS. The conditions stipulated by DGMS in the permission are being followed & regularly monitoring for subsidence is being done.
III	High root density tree species shall be selected and planted over areas likely to be attended by subsidence.	Subsidence is being monitored regularly and till date no subsidence on the surface has been observed and records of the same are maintained.
IV	Coal Extraction Shall also be optimized in areas where agriculture production is continuing. Some pillars shall be left below the agriculture land. No coal depillaring shall be undertaken below areas of habitation.	Presently mine is temporarily discontinued since 07.09.2023. Subsidence is being monitored regularly and till date no subsidence on the surface has been observed. In the past depillaring operation in tenancy land was carried out, no subsidence was observed and reported by the habitants. The depillaring operation are carried out after taking due permission from DGMS. The conditions stipulated by DGMS in the permission are being followed & regularly monitoring for subsidence is being done.
V	Subsidence should be monitored closely and if the subsidence is found exceeding permitted limits, then the landowners should be adequately compensated with mutual agreement of the landowners.	Subsidence is being monitored regularly and till date no subsidence on the surface has been observed. Depillaring is carried out as per DGMS guidelines and records of the same are maintained. Presently mine is temporarily discontinued since 07.09.2023.
VI	Garland drain (size, gradient & length) around the safety areas such as mine shaft and low lying areas & sump Capacity should be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper setting of silt material.	This is a UG mine and the precautions being taken to prevent the risk of inundation due to surface water as per CMR 1957. Adequate sump capacity provided in UG dip site working for settling of silt material.

VII	Water sprinkling system shall be provide to check fugitive emission from loading operations, conveyor system, haulage roads, transfer points, etc. Mobile sprinklers shall be provided in major haul roads and with high levels of SPM/RSPM.	<p>03 Nos. of Fixed Water Sprinklers provided over conveyor belt.</p> <p>01 Nos. of mobile water tanker (Capacity -4500 Litres) provided for dust suppression on coal transport roads.</p> <p>Presently mine is temporarily discontinued since 07.09.2023.</p> <p>Monitoring of Ambient Air quality and Water Quality is carried out once in a fortnight as per GSR 742 (E) dated 25.09.2000.</p> <p>The monitoring is carried out by Central Mine Planning and Design Institute Limited (CMPDIL), a NABL/ NABET approved laboratory. The measurement techniques follow the prescribed guidelines and Standards.</p> <p>The monitoring results are submitted along with six monthly EC compliance reports to MPPCB and MOEF, Bhopal.</p>										
VIII	Major approach road shall be black topped and properly maintained.	All major coal transport road transport roads are black - topped										
IX	Drills shall be wet operated only to avoid fugitive dust emission.	In U/G mine drilling in coal faces is done by portable hand- held electric drill machine duly approved by DGMS.										
X	A progressive afforestation plan shall be prepared & implemented for the undisturbed area and shall include areas under green belt development .Areas along roads, along ML boundary, township outside the lease area etc by planting native plant species in consultation with the local DFO /Agriculture department. The density of the trees should around by 2500 plants per Ha.	<p>Total plantation 81500 has been carried out.</p> <table border="1" data-bbox="873 898 1464 1215"> <thead> <tr> <th data-bbox="873 898 943 961">S.L No</th> <th data-bbox="943 898 1141 961">Location</th> <th data-bbox="1141 898 1281 961">Area (Ha)</th> <th data-bbox="1281 898 1464 961">Nos.</th> </tr> </thead> <tbody> <tr> <td data-bbox="873 961 943 1215">1</td> <td data-bbox="943 961 1141 1215">Total plantation including old plantation in and around the mine leasehold area</td> <td data-bbox="1141 961 1281 1215">32 Ha</td> <td data-bbox="1281 961 1464 1215">81500</td> </tr> </tbody> </table>			S.L No	Location	Area (Ha)	Nos.	1	Total plantation including old plantation in and around the mine leasehold area	32 Ha	81500
S.L No	Location	Area (Ha)	Nos.									
1	Total plantation including old plantation in and around the mine leasehold area	32 Ha	81500									
XI	Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells & constructing new piezometers. The monitoring for water levels should be done at least four times a year in pre Monsoon (May) Monsoon (August), Post Monsoon (November) & winter (January) seasons & quality in May data thus collected should be submitted to the MOEF & CGWB, Regional office quarterly within one month of Monitoring	Monitoring of ground water level along with quality is being done through a certified agency, four times a year as specified. The annual ground water monitoring and groundwater quality reports are submitted to Regional Offices of MOEF Bhopal and CGWB Bhopal. Reports for the Oct. 2025 to Mar. 2026 are enclosed.										
XII	The company shall put up artificial groundwater recharge measures for augmentation of groundwater resource .The project authorities should meet water requirement of nearby village (s ) in case village wells go dry due to de – watering of the mines.	<p>Water is supplied to nearby villages through water tanker as &amp; when required.</p> <p>A rooftop rainwater harvesting system has been provided at Community hall of Mohan UG mine.</p>										
XIII	Mine discharge water particularly TDS shall be treated to confirm to prescribed levels before discharge into the natural environment.	<p>The mine has one Sedimentation tanks of capacity 300 m<sup>3</sup>.</p> <p>The mine water discharged is treated in two stages settling-first at UG sump and subsequently at surface sedimentation tank.</p>										

		<p>The final effluent after settling meets the standards prescribed by GSR 742 (e) dated 25.09.2000. Mine water discharged is utilized in dust suppression, roof bolting, plantation etc. In case of mine water exceeding the utilization, the overflow from the settling tank is allowed to discharge in nearby nallah.</p> <p>Presently there is no mine water discharge from the mine.</p>
XIV	<p>Beside carrying out regular periodic health check up of their workers, 10 % of the workers identified from work force engaged in active mining operations shall be subjected to health check up for occupational diseases and hearing impairment, if any through an agency such as NIOH, Ahmadabad within period of one year &amp; the results reported to this Ministry &amp; to DGMS</p>	<p>Periodical medical examination (P.M.E.) are carried out compulsorily on each employee once in five years with the purpose of detecting and keeping the record of diseases with specific importance to the coal workers viz. Pneumoconiosis. During P.M.E. the candidates are subject to complete clinical examination relating to occupational diseases and hearing impairment. As WCL is having all the infrastructure facilities to comply with all statutory obligations regarding occupational health survey of all its employees, help from external organization i.e.: NIOH, Ahmedabad is not required.</p> <p>PME conducted-364 nos of employees and workers during the FY 2025-26 against a target of 434 nos. in WCL Kanhan Area.</p>
XV	<p>For monitoring land use pattern and post for mining land use a time series of land use maps based on satellite imagery (on a scale of 1:5000) of the core zone and buffer zone from the start of the project until end of mine life shall be prepared once in a 3 year (for any one particular season which is consistency in the time series) and the report submitted to MOEF and its regional office Bhopal.</p>	<p>Land Use monitoring is being done through satellite imagery as specified. The land use monitoring report for Pench-Kanhan- Tawa valley for the year 2020 is uploaded on the website of WCL (westerncoal.in). The hyperlink of the report is -</p> <p><a href="http://103.59.142.228:8081/wclweb/TPK_CF_2020.pdf">http://103.59.142.228:8081/wclweb/TPK_CF_2020.pdf</a></p>
XVI	<p>The company shall obtain prior approval of CGWA/CGWB Regional Official for use of ground water if any, for mining operations.</p>	<p>Complied. NOC has been obtained from CGWA for use of groundwater vide NOC no-CGWA/NOC/MIN/REN/1/2025/11989 valid upto 31/10/27.</p>
XVII	<p>Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells &amp; constructing new piezometers. The monitoring for water levels should be done at least four times a year in pre Monsoon (May) Monsoon (August), Post Monsoon (November) &amp; winter (January) seasons &amp; quality in May data thus collected should be submitted to the MOEF &amp; CGWB, Regional office quarterly within one month of Monitoring</p>	<p>Monitoring of ground water level along with quality is being done through a certified agency- Anacon Laboratories Pvt. Ltd. Nagpur, four times a year as specified. The annual ground water monitoring and groundwater quality reports are submitted to Regional Offices of MOEF Bhopal and CGWB Bhopal. Reports for the Oct. 2025 to Mar. 2026 are enclosed.</p>
XVIII	<p>The company shall put up artificial groundwater recharge measures for augmentation of groundwater resource. The project authorities should meet water requirement of nearby village (s) in case village wells go dry due to de-watering of the mines.</p>	<p>Water is supplied to nearby villages through water tanker as and when required</p>

XIX	ETP shall also be provided for workshop and CHP waste water.	This is a UG mine and there is no HEMM. There is no workshop hence not applicable. Presently mine is temporarily discontinued since 07.09.2023.
XX	Besides carrying out regular periodic health checkup for their workers. 10% of the workers identified from workforce engaged in active mining operations shall be subjected to health checkup for occupational diseases and hearing impairment, if any, through an agency such as NIOH, Ahmedabad with in a period of two years and the results reported to this Ministry and to DGMS.	Periodical medical examination (P.M.E.) are carried out compulsorily on each employee once in five years with the purpose of detecting and keeping the record of diseases with specific importance to the coal workers viz. Pneumoconiosis. During P.M.E. the candidates are subject to complete clinical examination relating to occupational diseases and hearing impairment. As WCL is having all the infrastructure facilities to comply with all statutory obligations regarding occupational health survey of all its employees, help from external organization i.e.: NIOH, Ahmedabad is not required. PME conducted-364 nos of employees and workers during the FY 2025-26 against a target of 434 nos. in WCL Kanhan Area.
XXI	A Final mine closure plan along with details of corpus fund shall be submitted immediately upon receipt of EC to the Ministry of Environment & Forest RO, Bhopal for approval.	Copy of Approved Mine Closure Plan enclosed with six monthly EC compliance report. Total Amount deposited in Escrow account of Mohan UG mine is 1246.312 Lakhs till date and balance as on 31/03/25 is INR 15,27,10,737/-
XXII	For monitoring land use pattern and post for mining land use a time series of land use maps based on satellite imagery (on a scale of 1:5000) of the core zone and buffer zone from the start of the project untill end of mine life shall be prepared once in a 3 year (for any one particular season which is consistence in the time series) and the report submitted to MOEF and its regional office Bhopal.	Land Use monitoring is being done through satellite imagery as specified. The land use monitoring report for PENCH-KANHAN- TAWA valley for the year 2020 is uploaded on the website of WCL (westerncoal.in). The hyperlink of the report is - <a href="http://103.59.142.228:8081/wclweb/TPK_CF_2020.pdf">http://103.59.142.228:8081/wclweb/TPK_CF_2020.pdf</a>

## B) General Conditions: -

i)	No change in mining technology & scope of working should be made without prior Approval of the Ministry of Environment & Forests.	Noted for Compliance.
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ii)	No change in the calendar plan including excavation, quantum of mineral coal waste should be made.	Being Complied.
iii)	Four ambient air quality Monitoring stations should be established in the core zone as well as in the buffer zone for RPM, SPM, SO <sub>2</sub> , NO <sub>X</sub> & CO Monitoring location of the stations should be decided based on the meteorologically data topographical features and environmentally and ecologically sensitive target in Consultations with state pollution control board.	Four ambient air quality status have been established in consultation with SPCB. Data on Ambient air Quality (SPM, RPM, SO <sub>2</sub> , Na) is being regularly submitted to MPPCB & MOEF. Monitoring reports for period Oct-25 to Mar-26 are attached.  Also, CAAQMS Monitoring station has been established in the buffer zone of the mine, to monitor the air quality parameters in compliance of the CTO conditions issued by MPPCB (Photographs enclosed).
iv)	Fugitive dust emission from all sources should be controlled regularly Monitored & data recorded properly. Water spraying arrangements on haul roads, wagon loading, dump trucks, (loading, unloading,) should be provided, & properly Maintained	1 Nos. of mobile water tanker (Capacity -4500 Litres) provided for dust suppression on coal transport roads.  Wind Barrier wall (Height – 6.0 metres, Length – 380 metres) provided at Palachourai Railway siding at a cost of Rs. 19.15 Lakhs in the year 2016-17 (Photograph enclosed) Presently mine is temporarily discontinued since 07.09.2023.
v)	Data on ambient air quality (RPM, SPM, SO <sub>2</sub> ,NO <sub>X</sub> & CO) should be regularly submitted to the Ministry including its Regional office at Bhopal & the state pollution control board/Central pollution control board once in six months.	Data on Ambient air Quality (SPM, RPM, SO <sub>2</sub> , Na) is being regularly submitted to MPPCB & MOEF along with six monthly EC compliance reports.  Also, CAAQMS Monitoring station has been established in the buffer zone of the mine, to monitor the air quality parameters in compliance of the CTO conditions issued by MPPCB(Photographs enclosed).
vi)	Adequate measure should be taken for control noise levels below 85 db (A) in the work environment. Worker engaged in blasting & drilling operation ,operation of HEMM should be provide with ear plugs & muff's	Noted. Regular monitoring of noise level is done. Monitoring report for period Oct-25 to Mar-26 is enclosed. This is a U/G mine & there is No HEMM all machineries viz Haulages, belt conveyors etc deployed in U/G. The noise level control measures in U/G workings are covered vide CMR 1957. Presently mine is temporarily discontinued since 07.09.2023.
vii)	Industrial waste water (workshop & water from the mines) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 may 1993 and 31 Dec 1993 Or as amended from time to time. Oil & grease trap should be installed before discharge of workshop effluents	Noted. Regular monitoring of mine water is done. Monitoring report for period Oct-25 to Mar-26 enclosed. This is a U/G mine & there is No HEMM all machineries viz Haulages, belt conveyors etc deployed in U/G. The noise level control measures in U/G workings are covered vide CMR 1957. Presently mine is temporarily discontinued since 07.09.2023.
viii)	Vehicular emission should be kept under control & regularly Monitored. Vehicles used for transporting & mineral should be covered with tarpaulin optimally loaded.	All light vehicles like jeep; school buses Ambulance etc are mandated to have a PUC Certificate. Vehicles used for coal transportation are covered with tarpaulin covering and optimally loaded. Presently mine is temporarily discontinued since 07.09.2023.

ix)	Environmental Laboratory should be established with adequate number and types of pollution Monitoring & analysis equipments in consultation with the state pollution control board.	Environmental monitoring is done by CMPDIL. A well established environment laboratory exists in CMPDIL which is NABL accredited. (Copy of NABL Certificate enclosed).
x)	Personnel working in dust area should be wear protective respiratory devices & they should also provide with adequate training & information on safety & health aspects. Occupational health surveillances program of the worker should be undertaken periodically to observe any contradictions due to exposure to the coal dust and take corrective measure ,if needed	All workmen are given protective gears as per statute. Dust monitoring underground is carried out using Personnel Dust Sampler (PDS) at required intervals. Occupational health survey i.e Periodic Medical Examination (PME) is done for every workman once in five (5) years. PME conducted for WCL, Kanhan Area employees which currently has one active mine- Sharda UG.. PME conducted-364 nos of employees and workers during the FY 2025-26 against a target of 434 nos. in WCL Kanhan Area.
xi)	A separate Environmental managements cell with suitable qualified personnel should be set-up under the control of Senior Executive, who will report directly to the head of company	There is well established environmental cell at corporate HQ, headed by GM (Env) reporting to Director (Tech) P & P .He is assisted by well qualified & well trained team of Engineers of Mining, Civil & Environment disciplines. At area level, the team is headed by General Manger (Operations) & assisted by Area Nodal Officer (Environmental) under the overall control of General Manger of the Area. At project level the team is headed by Sub Area Manger of the project & assisted by project Nodal officer (Environment).
xii)	The Funds earmarked for Environmental protection measures should be kept separate account should be diverted for other purpose. Year wise expenditure should be reported to the Ministry & Regional office located office at Bhopal.	A separate budget for Environmental Cell is provided and the funds are utilized for the assigned purposes only. Year-wise Environmental expenditure is reported in the Six Monthly EC compliance report and Environmental Audit Statement submitted yearly.
xiii)	The Regional office of this Ministry located office at Bhopal shall monitor compliance of the stipulated conditions. The project authorities should be extend full co –operation to the officer (s) of the Regional Office by furnishing the requisite data /information/ monitoring reports	Noted
xiv)	A copy of clearance letter will be marked to the concerned Panchayat/local NGO. If any from whom and suggestion /representation while processing the proposal.	Complied. Copy of the letter enclosed.
xv)	State pollution control board should be display a copy of the clearance letter The Regional office, District Industry center & Collector's office /Tehsildar office for 30 days.	This is for MPPCB
xvi)	The project authorities should advertise at least in two local news paper widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within seven days of the clearance letter informing the project has been accorded	Copies of Advertisement enclosed.

	environmental clearance and a copy of clearance letter is available with state pollution control board & may also be seen at web site Ministry of Environment & Forests .at <b>http://envfor.nic.in</b>	
3	The Ministry or any other competent may alter/modify the above condition or stipulated any further condition in the interest of environment protection	Noted
4	Failure to the comply with any of the condition mentioned above may result withdrawal of the clearance & attract action under the provisions of environment (protection) Act 1986	Noted
5	The above condition will be enforced inter-alia, under the provision of water (prevention & control of pollution) Act1974 the air (prevention & control of pollution) Act1981 the environment (protection) Act 1986 & public liability insurance Act 1991 along with their amendments & rules.	Noted



"Under Jurisdiction of Nagpur Court Only"

वेस्टर्न कोलफील्ड्स लिमिटेड

Western Coalfields Limited

(A Govt of India Enterprise)

कॉ. कार्या. : कोल ईस्टेट, सिविल लाईन्स, नागपुर-४४० ००१

Regd. O.ffc. - Coal Estate, Civil Lines Nagpur-440 01

संदर्भ क्र. 1  
Ref. No.:

W CL/KAN/AG/Civil/Env./

दिनांक 1

Date:

7.2.2009

To

The Sarpanch  
Grampanchayat Palachourai/Ambara / Ghoghri/ Shivpur.

Sub: Environment Clearance For Mohan (Maori)  
U.G. Expansion project Village Maori Distt:  
Chhindwara Madhya Pradesh (Expn. in production  
capacity from 0.45 MTPA to 1.00 MT PA.

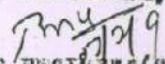
Ref: Letter No. 11015/123/2008-IA .II(M) Dated  
2.2.2009. by Minister of Environment & Forest.


Dear Sir,

Enclosed please find here with a copy of Environment  
Clearance letter as mentioned to above reference for your record.

Thanking you.

Yours faithfully

  
SUPER. ENGINEER (CIVIL)  
AMPARA SUE AREA.

  
सरपंच  
ग्राम पंचायत अमबारा  
जि. ना. चिंदवारा जिला चिंदवारा (M.P.)



सरपंच

ग्राम पंचायत पालाचौरई

  
सरपंच  
ग्राम पंचायत अमबारा

**वेस्टर्न कोल्फील्ड्स लिमिटेड**

(कोल इंडिया लि. का एक उपक्रम)

**सूचना**

वेस्टर्न कोल्फील्ड्स लिमिटेड के कन्हान क्षेत्र की मोहन (मोआरी) भूमिगत खदान उत्पादन क्षमता विस्तार 0.45 से 1.00 मिलियन टन प्रतिवर्ष कोयला उत्पादन के लिए मु.पो. अम्बाड़ा तहसील जुमारदेव, जिला- छिन्दवाड़ा (मध्यप्रदेश) के लिए पर्यावरण स्वीकृति।

वेस्टर्न कोल्फील्ड्स लिमिटेड के कन्हान क्षेत्र के अंतर्गत मोहन (मोआरी) भूमिगत खदान उत्पादन क्षमता विस्तार 0.45 से 1.00 मिलियन टन प्रतिवर्ष कोयला उत्पादन के लिए वन एवं पर्यावरण मंत्रालय पर्यावरण स्वीकृति प्रदान की गई है। पर्यावरण स्वीकृति के पत्र की प्रतिलिपि मध्यप्रदेश प्रदूषण नियंत्रण मंडल के पास उपलब्ध है और एवं पर्यावरण मंत्रालय की वेबसाइट पर भी देख सकते हैं।

<http://envfor.nic.in>

**देविक भारकर 10.02.09**

**वेस्टर्न कोल्फील्ड्स लिमिटेड**

(कोल इंडिया लि. का एक उपक्रम)

**सूचना**

विषय:- वेस्टर्न कोल्फील्ड्स लिमिटेड के कन्हान क्षेत्र की मोहन (मोआरी) भूमिगत खदान उत्पादन क्षमता विस्तार 0.45 से 1.00 मिलियन टन प्रतिवर्ष कोयला उत्पादन के लिये मु.पो.अम्बाड़ा तहसील जुमारदेव

जिला -छिन्दवाड़ा(मध्यप्रदेश) के लिये पर्यावरण स्वीकृति।

वेस्टर्न कोल्फील्ड्स लिमिटेड के कन्हान क्षेत्र के अंतर्गत मोहन (मोआरी) भूमिगत खदान उत्पादन क्षमता विस्तार (0.45 से 1.00 मिलियन टन प्रतिवर्ष कोयला उत्पादन के लिये वन एवं पर्यावरण मंत्रालय द्वारा पर्यावरण स्वीकृति प्रदान की गई है। पर्यावरण स्वीकृति के पत्र की एक प्रतिलिपि मध्यप्रदेश प्रदूषण नियंत्रण मंडल के पास उपलब्ध है और वन एवं पर्यावरण मंत्रालय के नीचे दिये गये वेबसाईट पर भी देख सकते हैं।

<http://env for.nic.in>

**जबलपुर एक्सप्रेस 08.02.2009.**



National Accreditation Board for  
Testing and Calibration Laboratories

**CERTIFICATE OF ACCREDITATION**

**ENVIRONMENT LABORATORY, CMPDI**

has been assessed and accredited in accordance with the standard

**ISO/IEC 17025:2017**

**"General Requirements for the Competence of Testing &  
Calibration Laboratories"**

for its facilities at

GROUND FLOOR, CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED, REGIONAL  
INSTITUTE-IV, NAGPUR, MAHARASHTRA, INDIA

in the field of

**TESTING**

Certificate Number: TC-7102

Issue Date: 29/06/2022

Valid Until: 28/06/2024

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.  
(To see the scope of accreditation of this laboratory, you may also visit NABL website [www.nabl-india.org](http://www.nabl-india.org))

Name of Legal Identity : CENTRAL MINE PLANNING & DESIGN INSTITUTE LIMITED

Signed for and on behalf of NABL



N. Venkateswaran  
Chief Executive Officer

## ENVIRONMENTAL MANAGEMENT AT MOHAN UG MINE

### Air Pollution Control Measures

- i. 03 Nos. of Fixed Water Sprinklers provided near bunker and over conveyor belt.
- ii. 01 Nos. of mobile water tanker (Capacity -4500 Litres) provided for dust suppression on coal transport roads.
- iii. Black Topped road from Weighbridge to Palachourai Siding.
- iv. Wind Barrier wall (Height – 6.0 metres, Length – 380 metres) provided at Palachourai Railway siding at a cost of Rs. 19.15 Lakhs in the year 2016-17 (Photograph enclosed)
- v. Total plantation of 81500 nos in approximately 32 Ha area has been carried out and around mine lease area since inception of mine.
- vi. For Air Quality monitoring purpose, a CAAQMS Monitoring station has been established in the buffer zone of the mine, in the FY 2021-22 at a cost of Rs. 66.06 lakhs, to monitor the air quality parameters in compliance of the CTO conditions issued by MPPCB (Photographs enclosed).



CAAQMS installed in Buffer Zone of Mohan UG Mine



CAAQMS Room



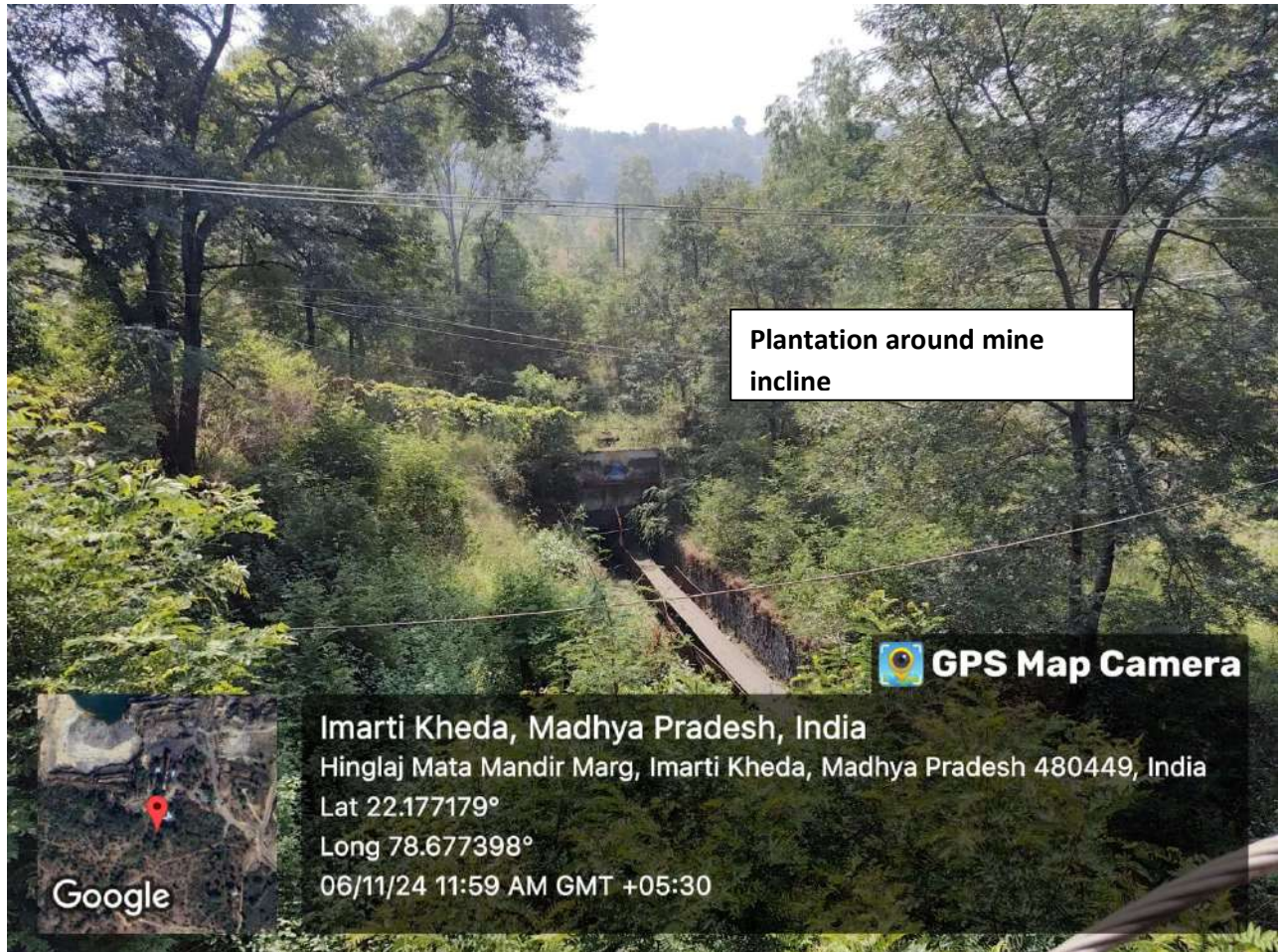


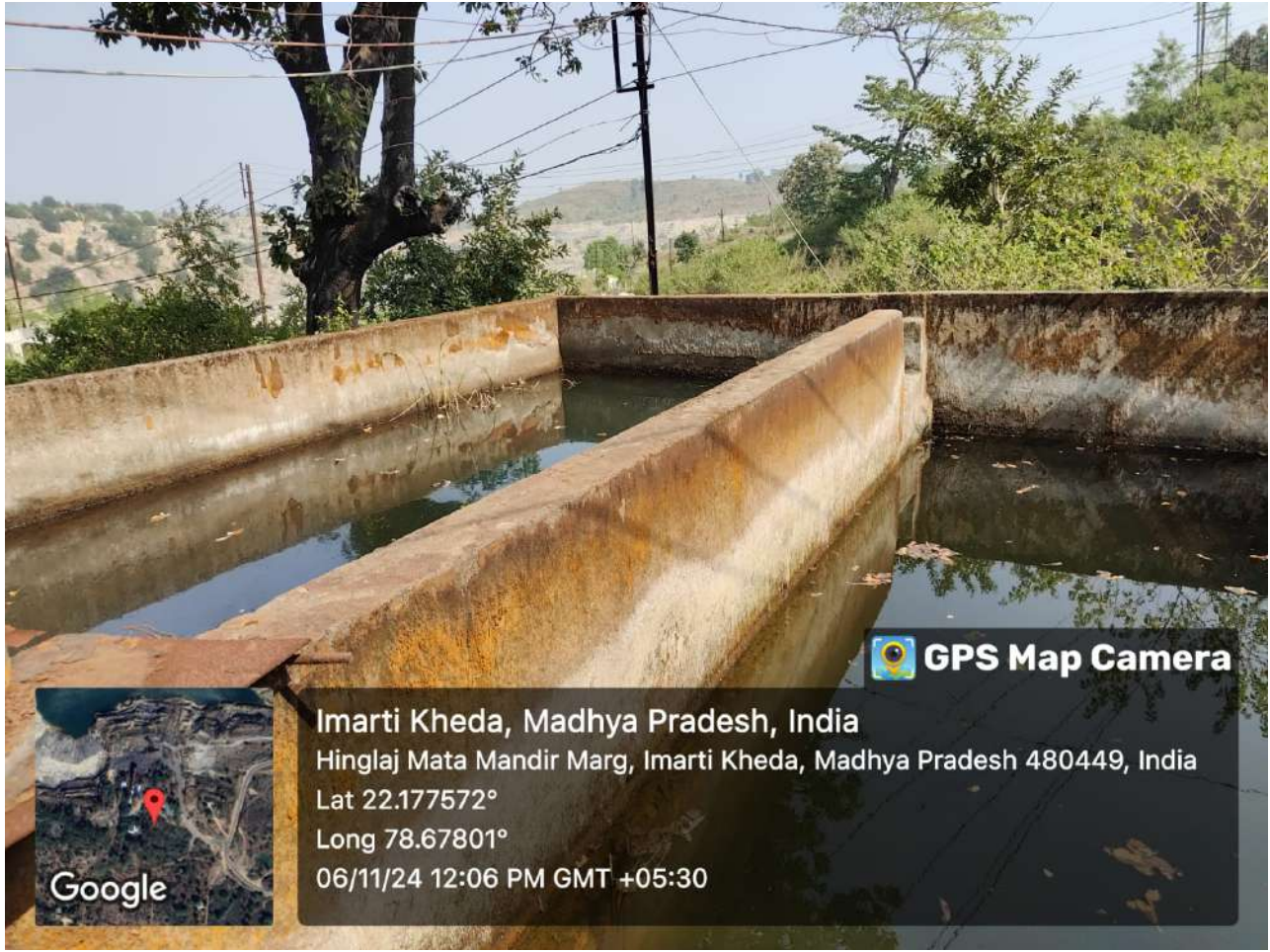
Use of Mobile Water Tankers for Dust Suppression

22.17843, 78.678, 787.0m  
10-Feb-2023 12:33:58 PM



Plantation around mine premises – Mohan  
UG





 **GPS Map Camera**



**Imarti Kheda, Madhya Pradesh, India**  
Hinglaj Mata Mandir Marg, Imarti Kheda, Madhya Pradesh 480449, India  
Lat 22.177572°  
Long 78.67801°  
06/11/24 12:06 PM GMT +05:30



## **2. Water Pollution Control and Water Conservation Measures**

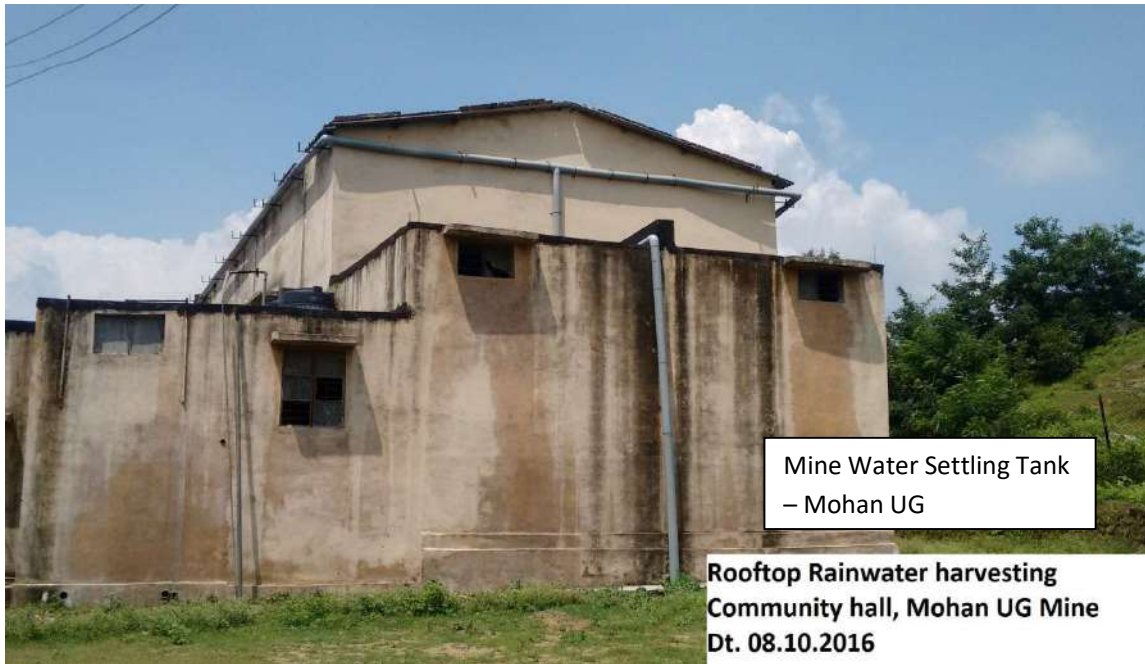
1. For treatment of mine water there are two Sedimentation tanks of Capacity 100 m<sup>3</sup> and 300 m<sup>3</sup>. Arrangements are in place to recycle the mine water for roof bolting in the mine for dust suppression at working face and for dust suppression through sprinklers and mobile tankers.

Mine water parameters are monitored every fortnight as per GSR 742(E) dated 25.09.2000

**Presently there is no mine water discharge from the mine.**

2. Individual Septic Tank & Soak Pit provided at each quarter in Mohan UG colony for sewage treatment.

3. Roof Top rainwater harvesting system installed at community hall, Mohan UG mine.



Mine Water Settling Tank  
– Mohan UG

Rooftop Rainwater harvesting  
Community hall, Mohan UG Mine  
Dt. 08.10.2016



Rooftop Rainwater harvesting  
Community hall, Mohan UG Mine  
Dt. 08.10.2016

**Copy of Consent to Operate issued by MPPCB**



## M.P. Pollution Control Board

E-5, Arera Colony Paryavaran Parisar, Bhopal - 16 MP Tele : 0755-2466191, Fax-0755-2463742



# Consent Order

RED-LARGE

CCA-Renewal

PCB ID: 15947

Outward No:124119,14/11/2025

Consent No:AW-63351

To,  
The Occupier,  
M/s. Mohan (Maori) U/g Coal Mine, WCL, Kanhan area Chhindwara,  
Ambra, City : Muari, Tal : Jamai,  
Dist : Chhindwara (M.P.)- 480449



**Subject:** Grant of Renewal of Consent to Operate under section 25 of the Water (Prevention & Control of Pollution) Act,1974 & under section 21 of the Air (Prevention & Control of Pollution) Act,1981

**Ref:** Your Application Receipt No. 1414990 Dt. 31/10/2025 and last communication received on Dt.29/10/2025

With reference to your above application for Renewal of consent to operate has been considered under the aforesaid Acts and existing rules therein. The M. P. Pollution Control Board has agreed to grant consent up to **31/10/2027**, subject to the fulfillment of the terms & conditions, enclosed with this letter and-

**SUBJECT TO THE FOLLOWING CONDITIONS :-**

- a. Location: Ambra, City : Muari, Tal : Jamai, Dist : Chhindwara (M.P.)- 480449  
Latitude : 22.1777 Longitude : 78.6775
- b. Mining Lease Area:: 800 Ha
- c. Product & Production Capacity:

Activity/Product	Production capacity
Mining of Coal	4,50,000 Metric Ton Per Year.

Note:-

1. For any change in above industry shall obtain fresh consent from the Board.
2. PP shall ensure that mining done in sanctioned lease area as per valid mining plan duly approved by the competent Authority & in compliance of conditions laid in EC granted by MoEF & CC.
3. Mine management shall ensure proper maintenance of STP and ETP so as to treat and properly utilize the treated effluent.
4. As per provision of Fly Ash Utilization Notification Issued by MoEF & CC, GOI on dt 31.12.2021; The PP shall ensure compliances listed in the notification. The utilization of fly ash in the OB dumps/Mine voids shall be done under EPR as per provision of above rules.

The Validity of the consent is up to **31/10/2027** and has to be renewed before expiry of consent validity. Online application through XGN with annual license fees in this regard shall be submitted to this office 6 months before expiry of the consent/Authorization. Board reserves the right to amend/cancel / revoke the above condition in part or whole as and when required.

Enclosures:-

- \* Conditions under Water Act
- \* Conditions under Air Act
- \* General conditions

CC to :-

1. District Mining Officer, (Mining Section), Collector office, Chhindwara Dist, Chhindwara (M.P.) for information.
2. M.P. State Mining Corporation, Arera Hills, Jail Road, Bhopal (M.P.) for necessary action please.
3. Regional officer, Regional office, MPPCB, Chhindwara (M.P.)

By the order of Chairman, MPPCB

ACHYUT ANAND MISHRA  
Member Secretary



(Organic Authentication on AADHAR from UIDAI Server)  
TPAV # 51542W963E

Signature Not Verified  
Digitally Signed by : A. A  
Mishra, Member Secretary  
Date: 14/11/2025 05:52:26 PM

**CONDITIONS PERTAINING TO WATER (PREVENTION & CONTROL OF POLLUTION) ACT 1974 :-**

1. The daily quantity of trade effluent of the unit shall not exceed **80.0 KL/day**, and the daily quantity of sewage of the unit shall not exceed **5.0 KL/day**.

**2. Trade Effluent Treatment:-**

The applicant shall operate effluent treatment system and maintain the same properly to achieve following standards-

pH	Between	5.5 - 9.0	TDS	Not exceed	2100 mg/l.
Suspended Solids	Not exceed	100 mg/l.	Chlorides	Not exceed	1000 mg/l.
BOD <sub>5</sub> Days 27 °C	Not exceed	30 mg/l.			
COD	Not exceed	250 mg/l.			
Oil and grease	Not exceed	10 mg/l.			

*For other parameters general standards of discharge as notified under EP Act 1986 and standards notified by MPPCB from time to time shall be applicable.*

**3. Sewage Treatment :-**

The applicant shall operate and maintain sewage treatment facility to achieve following standards-

pH	Between	6.5 - 9.0
Suspended Solids	Not exceed	100 mg/l.
BOD 3 Days 27 °C	Not exceed	30 mg/l.
COD	Not exceed	250 mg/l.
Oil and grease	Not exceed	10 mg/l.
fecal coliform	Not exceed	1000 MPN/100 ml

4. The effluent shall be treated up to prescribed Standards and reuse in the process, for cooling and for green belt devolvement/gardening within premises. Hence zero discharge condition shall be practiced. In no case treated effluent shall be discharged outside of industry/unit premises.

5(A) The Project Proponent is advised to obtain permission of CGWA for ground water extraction, installation of separate digital water meters to measure the consumption of ground water as well as Municipal water supply to the colony as per order of Hon'ble NGT in case no. 438/2018. The connectivity of the above meters shall be given to server of MPPCB. Also the data shall be submitted online through XGN monthly patrak/statements.

5(B) The Water meter preferably electromagnetic/ultrasonic type with digital flow recording facilities shall be installed at out let of STP to measure the flow of waste water and data shall be submitted online through XGN monthly patrak/statements.

Sr	Water Code (Qty in KL/ Day)	WC : 350.0	WWG :85.0	Water Source
1	Domestic Purpose	20.0	5.0	Other
2	Spray in Mines	330.0	80.0	Other

6. Any change in production capacity, process, raw material used etc. and for any enhancement of the above prior permission of the Board shall be obtained. All authorized discharges shall be consistent with terms and conditions of this consent. Facility expansions, production increases or process modifications which result new or increased discharges of pollutants must be reported by submission of a fresh consent application for prior permission of the Board.

7. All treatment/control facilities/systems installed or used by the applicant shall be regularly maintained in good working order and operate effectively/efficiently to achieve compliance of the terms and conditions of this consent

8. The specific effluent limitations and pollution control systems applicable to the discharge permitted herein are set forth as above conditions.

**9. Compilation of Monitoring data-**

- Samples and measurements taken to meet the monitoring requirements specified above shall be representative of the volume and nature of monitored discharge.
- Following promulgation of guidelines establishing test procedures for the analysis of pollutants, all sampling and analytical methods used to meet the monitoring requirements specified above shall conform to such guidelines unless otherwise specified sampling and analytical methods shall conform to the latest edition of the Indian Standard specifications and where it is not specified the guidelines as per standard methods for the examination of Water and Waste latest edition of the American Public Health Association, New York U.S.A. shall be used.
- The applicant shall take samples and measurement to meet the monthly requirements specified above and report online through XGN the same to the Board.

**10. Recording of Monitoring Activities & Results-**

- The applicant shall make and maintain online records of all information resulting from monitoring activities by this Consent.

**Consent No:AW-63351**

ii. The applicant shall record for each measurement of samples taken pursuant to the requirements of this Consent as follows:

- (i) The date, exact place and time of sampling
- (ii) The dates on which analysis were performed
- (iii) Who performed the analysis?
- (iv) The analytical techniques or methods used and
- (v) The result of all required analysis

iii. If the applicant monitors any Pollutant more frequently as is by this Consent he shall include the results of such monitoring in the calculation and reporting of values required in the discharge monitoring reports which may be prescribed by the Board. Such increased frequency shall be indicated on the Discharge Monitoring Report Form.

iv. The applicant shall retain for a minimum of 3 years all records of monitoring activities including all records of Calibration and maintenance of instrumentation and original strip chart regarding continuous monitoring instrumentation. The period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the applicant or when requested by Central or State Board or the court.

**11. Reporting of Monitoring Results:-**

Monitoring Information required by this Consent shall be summarized and reported by submitting a Discharge Monitoring report on line to the Board.

**12. Limitation of discharge of oil Hazardous Substance in harmful quantities:-**

The applicant shall not discharge oil or other hazardous substances in quantities defined as harmful in relevant regulations into natural water course. Nothing in this Consent shall be deemed to preclude the institution of any legal action nor relieve the applicant from any responsibilities, liabilities, or penalties to which the applicant is or may be subject to clauses.

**13. Limitation of visible floating solids and foam:**

During the period beginning date of issuance the applicant shall not discharge floating solids or visible foam.

**14. Disposal of Collected Solid waste/sludge-**

All hazardous waste/sludge shall be disposed of as per the Authorization issued under Hazardous & other waste (M&TM) Rules 2016. And/other Solids Sludges, dirt, silt or other pollutant separated from or resulting from treatment shall be disposed of in such a manner as to prevent any pollutant from such materials from entering any such water. Any live fish, Shell fish or other animal collected or trapped as a result of intake water screening or treatment may be returned to eaters body habitat.

**15. Provision for Electric Power Failure-**

The applicant shall assure to the consent issuing authority that the applicant has installed or provided for an alternative electric power source sufficient to operate all facilities utilized by the applicant to maintain compliance with the terms and conditions of the Consent.

**16. Prohibition of By pass system of treatment facilities-**

The diversion or by-pass of any discharge from facilities utilized by the applicant to maintain compliance with the terms and conditions of this Consent is prohibited except :

- i. where unavoidable to prevent loss of life or severe property damage, or
- ii. Where excessive storm drainage or run off would damage any facilities necessary for compliance with the terms and conditions of this Consent. The applicant shall immediately notify the consent issuing authorities in writing of each such diversion or by-pass in accordance with the procedure specified above for reporting non-compliance.

17. Mine management shall submit the information online through XGN in reference to compliance of consent conditions.

18. In case of any discharge found outside of unit premises the unit may be liable to pay environmental compensation as per NGT orders O.A. no 593/2017 dated 22.02.2021 and the industry shall be punishable or court case may be filed by the Board under provisions of the Water (Prevention & Control of Pollution) Act, 1974.

**Sector Specific Water condition:-**

1. The mine management shall maintain zero discharge conditions as far as possible. The Mine management shall optimize the water abstraction from the surface water source, if any, by utilizing the mine discharge for spraying on haul roads, mine area and loading - unloading area after proper treatment. The treated mine discharge shall also be utilized for sanitary purposes by providing separate supply lines, dust suppression and for plantation in order to ensure zero discharge status as far as possible.
2. Rain water harvesting shall be undertaken to recharge ground water source and status of implementation shall be submitted to the Board. Hydro-geological study of the area shall be reviewed annually. In case any adverse effect on ground water quality and quantity is observed, mining shall be stopped and resumed only after applying mitigating steps to restore.
3. The mine water should be treated in siltation ponds. The quality of siltation pond water shall be regularly monitored and mitigation measure shall be taken.
4. Mine management shall comply with the conditions stipulated in the Environmental Clearance granted by MoEF&CC.

**CONDITIONS PERTAINING TO AIR (PREVENTION & CONTROL OF POLLUTION) ACT 1981 :-**  
**Consent No:AW-63351**

1. The applicant shall operate and maintain air pollution control system to achieve the level of pollutants to the following standards:-

Name of section	Control equipment to be installed	SPM/RSPM/SO <sub>x</sub> /NO <sub>x</sub> (mg/NM <sup>3</sup> ) (Annual Average)
Loading-unloading, Transportation, Haul road, CHP etc	Dust Collector, Dust Suppressor, Green Belt, Water Sprinkler, Wind Breaking Wall	430 / 215/80/80 ( 24 Hr. Average : 600/300/120/120)

2. The Ambient air quality norms are prescribed in MoEF gazette notification no. GSR/826(E), dated: 16/11/09. Some of the parameters are as follows:

- Particulate Matter (less than 10 micron) - 100 µg/m<sup>3</sup> (PM10 µg/m<sup>3</sup> 24 hrs. basis)
- Particulate Matter (less than 2.5 micron) - 60 µg/m<sup>3</sup> (PM2.5 µg/m<sup>3</sup> 24 hrs. basis)
- Sulphur Dioxide [SO<sub>2</sub>] (24 hrs. Basis) - 80 µg/m<sup>3</sup>
- Nitrogen Oxides [NO<sub>x</sub>] (24 hrs. Basis) - 80 µg/m<sup>3</sup>
- Carbon Monoxide [CO] (8 hrs. Basis) - 2000 µg/m<sup>3</sup>

3. The industry shall take adequate measures for control of noise level generated from industrial activities within the premises less than 75 dB(A) during day time and 70 dB(A) during night time.

4. The industry/unit shall make the necessary arrangements for control of the fugitive emission from any source of emission/section/activities.

5. All other fugitive emission sources such as leakages, seepages, spillages etc shall be ensured to be plugged or sealed or made airtight to avoid the public nuisance.

6. The industry/ unit shall ensure all necessary arrangements for control of odour nuisance from the industrial activities or process within premises

7. All the internal roads shall be made pucca to control the fugitive emissions of particulate matter generated due to transportation and internal movements. Good housekeeping practices shall be adopted to avoid leakages, seepages, spillages etc.

8. Industry shall take effective steps for extensive tree plantation preferably of the local tree species within or around the industry/unit premises for general improvement of environmental conditions.

9. In case of emission found exceeding proscribed standards, the unit may be liable to pay environmental compensation as per NGT orders O.A. no 593/2017 dated 22.02.2021 and the industry shall be punishable or court case may be filed by the Board under provisions of the Air (Prevention & Control of Pollution) Act, 1981.

#### **Sector Specific Air condition:**

- Mine management shall regularly operate the CAAQMS station to monitor ambient air quality in the Singrauli area and its vicinity and shall provide its suitable unhindered connectivity with Environment Surveillance Centre of the MPPCB and transmit the data within stipulated time.
- Mine management shall strictly comply with the directions of the Hon'ble NGT in the matters concerning issues pertaining to coal mines and shall report accordingly.
- Coal crushing, conveyor system, haulage road, transfer points, coal loading and unloading in railway wagons / trucks should be provided with adequate number of high efficiency dust extraction / suppression / water sprinkling system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated. Dust control measures shall be adopted at coal transfer point of the machines as per the need.
- Major approach roads and haul roads shall be metal topped; drills shall be wet operated to reduce the fugitive emission.
- Sufficient number of water tanker for water sprinkling shall be provided for the control of fugitive emission from haul road.
- The coal transportation from mine to the Nandan Coal washery shall be done through dedicated conveyor arrangement only and the transportation by road shall not be carried out at all.

#### **GENERAL CONDITIONS:**

##### **1. MANAGEMENT & DISPOSAL OF FLY ASH:-**

MoEF &CC, GOI has issued notification dated 31.12.2021 regarding procedures & mandate to increase utilization of fly ash generated by the thermal power plants through the Coal mines under extended producers responsibility. This notification No.SO 5481 (E) dated 31.12.2021 has been published suppressing the previous Fly Ash Utilization Notification dt 14.09.199 as amended.

**Following paras no. 3 & 4 of part B at page no. 16 of the notification are reproduced for taking necessary action at your end –**

*(3) It shall be obligatory on all mines located within 300 Kilometres radius of thermal power plant to undertake backfilling of ash in mine voids or mixing of ash with external overburden dumps under extended Producer Responsibility (EPR). All mine owners or operators (Government, Public and Private sector) within three Hundred kilometres (by road) from coal or lignite based thermal power plants shall undertake measure to mix at least 25 percent of ash on weight to*

weight basis of the materials used for external dump of overburden, backfilling or stowing of mine (running or abandoned as the case may be) as per the guidelines of the Director General of Mines Safety (DGMS).

Provided that such thermal power stations shall facilitate the availability of required quality of ash by delivering ash free of cost and bearing the cost of transportation or transportation arrangement decided on mutually agreed terms and mixing of ash with overburden in mine voids and dumps shall be applicable for the overburden generated from the date of publication of this notification and the utilisation of ash in the said activities shall be carried out in accordance with guidelines laid down by the Central Pollution Control Board, Director General of Mines Safety and Indian Bureau of Mines.

Explanation- For the purpose of this sub paragraph, it is also clarified that the provisions of ash free of cost and free transportation shall be applicable, if thermal power plants serve a notice on the mine owner for the same and the mandate of using 25 percent of ash for mixing with overburden dump and filling up of mine voids shall not be applicable unless a notice is served on the mine owner by thermal power plant

(4) ( i ) All mine owners shall get mine closure plans (progressive and final) to accommodate ash in the mine voids and the concerned authority shall approve mine plans for disposal of ash in mine voids and mixing of ash with overburden dumps. The Ministry of Environment Forest and Climates Change (MOEFCC) has issued guidelines on 28th August, 2019 regarding exemption of requirement of Environment Clearance of thermal power plants and coal mines along with the guidelines to be followed for such disposal.

(ii ) The Ministry in consultation with Central Pollution Control Board (CPCB), Director General of Mine Safety (DGMS) and Indian Bureau of Mines (IBM) may issue further guidelines time to time to facilitate ash disposal in mine voids and mixing with overburden dumps and it shall be the responsibility of mine owners to get the necessary amendments of modification in the permission issued by various regulatory authorities within one year from the date of identification of such mines.

2. The non hazardous solid waste arresting in the mine premises sweeping, etc. be disposed off scientifically so as not to cause any nuisance/pollution. The applicant shall take necessary permission from civic authorities for disposal to dumping site. If required.

**Non Hazardous Solid wastes:-**

Type of waste	Quantity	Disposal
Scrap/ Plastic packing material wood, card board, gunny bags etc	Record should be maintained	Sale to authorized party/As Per CPCB, MoEF Guide lines / Others.

2. The applicant shall allow the staff of Madhya Pradesh Pollution Control Board and/or their authorized representative, upon the representation of credentials:

- To inspect raw material stock, manufacturing processes, reactors, premises etc to perform the functions of the Board.
- To enter upon the applicant's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this Consent.
- To have access at reasonable times to any records required to be kept under the terms and conditions of this Consent.
- To inspect at reasonable times any monitoring equipment or monitoring method required in this Consent: or,
- To sample at reasonable times any discharge or pollutants.

3. This consent is transferable in nature, in case of any change in ownership / management, the new owner / partner / directors / proprietor shall immediately apply for the consent with new requisite information.

4. The issuance of this Consent does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any invasion of personal rights, nor any infringement of Central, State or local laws or regulations.

5. Mine management shall install separate electric metering arrangement for running of pollution control devices and this arrangement shall be made in such fashion that any non functioning of pollution control devices shall immediately stop electric supply to the production and shall remain tripped till such time unless the pollution control device/devices are made functional. The record of electricity consumption for running of pollution control equipment shall be maintained and submitted to the Board every month

6. This consent is granted in respect of Water pollution control Act 1974 or Air Pollution Control act, 1981 only and does not relate to any other Department/Agencies. License required from other Department/Agencies have to be obtained by the unit separately and have to comply separately as per there Act / Rules.

7. Balance consent fee, if any shall be recoverable by the Board even at a later date.

8. The applicant shall submit such information, forms and fees as required by the board not later than 180 day prior to the date of expiration of this consent.

9. The Mine management shall submit environmental statement for the previous year ending 31st March on or before 30th September every year to the Board.

**Consent No:AW-63351**

10. Mine management shall obtain membership of Emergency Response Center of the Board if needed.
11. Knowingly making any false statement for obtaining consent or compliance of consent conditions shall result in the imposition of criminal penalties as provided under the section 42(g) of the Water Act or section 38 (g) of the Air Act.
12. After notice and opportunity for the hearing, this consent may be modified, suspended or revoked by the Board in whole or in part during its term for cause including, but not limited to, the following:
  - (a) Violation of any terms and conditions of this Consent.
  - (b) Obtaining this Consent by misrepresentation or failure to disclose fully all relevant facts.
  - (c) A change in any condition that requires temporary or permanent reduction or elimination of the authorized discharge.
13. On violation of any of the above-mentioned conditions the consent granted will automatically be taken as canceled and necessary action will be initiated against the Mine management.
14. The industry/unit shall also monitor the treated wastewater flow and report the same online through monthly patrol/statements.
15. The applicant shall take samples and measurement to meet the monthly requirements specified above and report online through XGN the same to the Board.
16. Ambient air quality at the boundary of the industry/unit premises shall be monitored and reported to the Board regularly on quarterly basis
17. The record of electricity consumption for running of pollution control equipment shall be maintained and submitted to the Board every month.
18. Industry/unit shall carry out environmental audit for every financial year from competent authority and report shall be submitted to the Board within 03 months from end of that financial year. The same procedure shall be followed for coming years regarding submission of environmental audit report before September of preceding year with environmental statement.

***Renewal of Consent as required under the Water (Prevention & Control of Pollution) Act, 1974 & The Air (Prevention & Control of Pollution) Act, 1981 is granted to your mine subject to fulfillment of all the conditions mentioned above. For further renewal purpose you shall have to make an application to this Board through XGN at least Six months before the date of expiry of this consent. The applicant without valid consent (for operation) of the Board shall not bring in to use any outlet for the discharge of effluent and gaseous emission.***

**For and on behalf of  
M.P. Pollution Control Board**

**By the order of Chairman, MPPCB**



**ACHYUT ANAND MISHRA  
Member Secretary**



**(Organic Authentication on AADHAR from UIDAI Server)  
TPAV # 51542W963E**

**Consent No:AW-63351**

**Kanhan Area**  
**Mohan Colliery**

**PRODUCTION DATA**

**Statement showing year wise production during last 05 years in respect of**  
**Mohan Colliery**

<b>Sl.No.</b>	<b>Year</b>	<b>Production</b>
1	2019-20	0.184 Million Tonnes
2	2020-21	0.189 Million Tonnes
3	2021-22	0.171 Million Tonnes
4	2022-23	0.150001 Million Tonnes
5	2023-24	0.038330 Million Tonnes
6	2024-25	Nil Mine is discontinued from 07-Sep-2023
7	2025-26	Nil



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FOR COMPANY USE ONLY  
The information given in this report is not to be communicated either directly or indirectly to the press or to any person not holding an official position in the CIL / Government

## ENVIRONMENTAL MONITORING REPORT

# MOHAN/ MAORI UG

KANHAN AREA

WESTERN COALFIELDS LTD.


JOB NO. 4094423067



APRIL 2025

Environment Laboratory  
NABL Accredited vide Cert. No. TC-7102  
CMPDI  
REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/APRIL-25/72	DATE OF ISSUE	25-05-2025
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
TEST REQUIRED	SPM: IS 5182 Part-4, PM-10: IS-5182 Part 23, PM2.5: IS 5182 Part 24, NO <sub>2</sub> : IS 5182 Part-06, SO <sub>2</sub> :IS 5182 Part-2		
SAMPLE DESCRIPTION	AIR SAMPLE	SAMPLING PLAN :	LQR 47
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:		16-04-25 TO 15-05-25

SAM OFFICE KMUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
14-04-2025	15-04-2025	320	203	57	17	15	Clear sky / Calm
23-04-2025	24-04-2025	335	220	59	19	17	Clear sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	


PIT OFFICE MOHAN KMUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
07-04-2025	08-04-2025	311	195	55	16	14	Clear sky / Calm
23-04-2025	24-04-2025	325	210	58	18	16	Clear sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY HEALTH CENTER KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
03-04-2025	04-04-2025	80	22	7	BDL	Clear sky / Calm	
04-04-2025	05-04-2025	83	25	8	BDL	Clear sky / Calm	
10-04-2025	11-04-2025	85	27	9	BDL	Clear sky / Calm	
11-04-2025	12-04-2025	87	29	10	BDL	Clear sky / Calm	
18-04-2025	19-04-2025	90	31	11	BDL	Clear sky / Calm	
19-04-2025	20-04-2025	93	33	13	10	Clear sky / Calm	
28-04-2025	29-04-2025	91	32	10	BDL	Clear sky / Calm	
29-04-2025	30-04-2025	92	31	12	BDL	Clear sky / Calm	
NAAQS, 2009		100	60	80	80		

AMBARA VILLAGE KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
03-04-2025	04-04-2025	81	23	7	BDL	Clear sky / Calm	
04-04-2025	05-04-2025	84	27	7	BDL	Clear sky / Calm	
10-04-2025	11-04-2025	86	29	9	BDL	Clear sky / Calm	
11-04-2025	12-04-2025	85	26	7	BDL	Clear sky / Calm	
18-04-2025	19-04-2025	88	28	8	BDL	Clear sky / Calm	
19-04-2025	20-04-2025	90	32	10	BDL	Clear sky / Calm	
28-04-2025	29-04-2025	93	31	12	10	Clear sky / Calm	
29-04-2025	30-04-2025	95	34	13	11	Clear sky / Calm	
NAAQS, 2009		100	60	80	80		

*J. Shy*

Analysed by

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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**FUGITIVE DUST MONITORING**

TEST REQUIRED	SPM: IS 5182 Part-4, PM-10: IS-5182 Part 23, PM2.5: IS 5182 Part 24		
SAMPLE DESCRIPTION	Air sample(Fugitive)		
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:	16-04-25 TO 15-05-25	

MANAGER OFFICE CHP KAUF1				
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )		ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	
FROM	TO	s	s	
28-04-2025	29-04-2025	367	252	Clear Sky Calm

PALACHURI KAUF2				
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )		ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	
FROM	TO	s	s	
29-04-2025	30-04-2025	328	212	Clear Sky Calm



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SAMPLE DESCRIPTION	Water sample		
Test Required	pH: IS 3025 -Part 11,TSS: IS 3025-Part 17,COD: APHA (24th Edition) 5220 C ,O &G: IS 3025-Part 39 & BOD: IS 3025 (Part 44)		
SAMPLING METHOD	LSOP 5	PERIOD OF PERFORMANCE OF LAB ACTIVITIES :	16-04-25 TO 15-05-25

MINE WATER DISCHARGE: KAOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
07-04-2025	4.73	34	48	BDL
28-04-2025	4.64	30	44	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10

*J. Chong*

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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**NOISE LEVEL MONITORING DATA**

SAMPLE DESCRIPTION	NOISE SAMPLE
Test Required	CPCB PROTOCOL FOR AMBIENT NOISE MEASUREMENT
SAMPLING METHOD	LSOP 6

FAN HOUSE:		KMUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
APRIL'25	08-04-2025	69.9	67.3
APRIL'25	28-04-2025	70.3	68.2
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(MOHAN MAORI):		KMUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
APRIL'25	08-04-2025	43.9	40.7
APRIL'25	28-04-2025	43.6	41.2
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

  
Yogesh Pidurkar  
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## ENVIRONMENTAL MONITORING REPORT

# MOHAN/ MAORI UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4094423067



JUNE 2025



Environment Laboratory

NABL Accredited vide Cert. No. TC-7102

CMPDI  
REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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TEST REPORT NO.	RIN/TR/JUNE-25/72	DATE OF ISSUE	7/25/2025
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
TEST REQUIRED	SPM: IS 5182 (Part-4), PM-10: IS-5182 (Part 23), PM2.5: IS 5182 (Part 24), NO2: IS 5182 (Part-06), SO2:IS 5182 (Part-2)		
SAMPLE DESCRIPTION	AIR SAMPLE	SAMPLING PLAN :	LQR 47
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:		16-06-25 TO 15-07-25

SAM OFFICE KMUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
		5	5	2	6	10	
6/14/2025	6/15/2025	277	163	52	14	12	Clear sky / Calm
6/22/2025	6/23/2025	261	158	46	13	11	Cloudy sky / Light breeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	


PIT OFFICE MOHAN KMUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
		5	5	2	6	10	
6/7/2025	6/8/2025	280	170	56	16	14	Cloudy sky / Light breeze
6/29/2025	6/30/2025	253	145	44	12	10	Rainy sky / Windy
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY HEALTH CENTER KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
		5	2	6	10		
6/3/2025	6/4/2025	89	30	10	BDL		Clear sky / Calm
6/4/2025	6/5/2025	85	32	11	10		Clear sky / Calm
6/12/2025	6/13/2025	83	29	13	11		Clear sky / Calm
6/13/2025	6/14/2025	80	28	9	BDL		Clear sky / Calm
6/17/2025	6/18/2025	79	26	7	BDL		Clear sky / Calm
6/18/2025	6/19/2025	76	27	6	BDL		Cloudy sky / Light breeze
6/23/2025	6/24/2025	81	31	10	BDL		Cloudy sky / Light breeze
6/24/2025	6/25/2025	74	25	6	BDL		Rainy / windy
NAAQS, 2009		100	60	80	80		

AMBARA VILLAGE KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
		5	2	6	10		
6/3/2025	6/4/2025	84	33	10	BDL		Clear sky / Calm
6/4/2025	6/5/2025	82	30	9	BDL		Clear sky / Calm
6/12/2025	6/13/2025	80	29	8	BDL		Clear sky / Calm
6/13/2025	6/14/2025	86	35	11	BDL		Clear sky / Calm
6/17/2025	6/18/2025	81	32	10	BDL		Clear sky / Calm
6/18/2025	6/19/2025	78	27	8	BDL		Cloudy sky / Light breeze
6/23/2025	6/24/2025	76	26	7	BDL		Cloudy sky / Light breeze
6/24/2025	6/25/2025	75	25	6	BDL		Rainy / windy
NAAQS, 2009		100	60	80	80		

*J. Shrivastava*

Analysed by


<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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SAMPLE DESCRIPTION	Water sample	
Test Required	pH: IS 3025 -(Part 11), TSS: IS 3025-(Part 17), COD: APHA (24th Edition) 5220 C , O & G: IS 3025-(Part 39) & BOD: IS 3025 (Part 44)	
SAMPLING METHOD	LSOP 5	PERIOD OF PERFORMANCE OF LAB ACTIVITIES : 16-06-25 TO 15-07-25

MINE WATER DISCHARGE: KAOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
6/14/2025	4.54	23	32	BDL
6/19/2025	4.65	25	36	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10

*J. Shing*

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**NOISE LEVEL MONITORING DATA**

SAMPLE DESCRIPTION	NOISE SAMPLE
Test Required	CPCB PROTOCOL FOR AMBIENT NOISE MEASUREMENT
SAMPLING METHOD	LSOP 6

FAN HOUSE:		KMUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
JUNE'25	6/4/2025	71.6	68.1
JUNE'25	6/23/2025	72.8	68.7
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(MOHAN MAORI):		KMUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
JUNE'25	6/4/2025	43.8	41.7
JUNE'25	6/23/2025	42.9	40.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

  
Yogesh Pidurkar  
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## ENVIRONMENTAL MONITORING REPORT

# MOHAN/ MAORI UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4094423067



JULY 2025

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/JULY-25/72	DATE OF ISSUE	25-08-2025
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
TEST REQUIRED	SPM: IS 5182 (Part-4), PM-10: IS-5182 (Part 23), PM2.5: IS 5182 (Part 24), NO2: IS 5182 (Part-06), SO2:IS 5182 (Part-2)		
SAMPLE DESCRIPTION	AIR SAMPLE	SAMPLING PLAN :	LQR 47
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:	16-07-25 TO 15-08-25	

SAM OFFICE   KMUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM <sub>5</sub>	PM <sub>10</sub> <sub>5</sub>	PM <sub>2.5</sub> <sub>2</sub>	NO <sub>2</sub> <sub>6</sub>	SO <sub>2</sub> <sub>10</sub>	
07-07-2025	08-07-2025	292	180	58	19	15	Clear sky / Calm
26-07-2025	27-07-2025	269	155	48	15	12	Rainy sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

PIT OFFICE MOHAN   KMUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM <sub>5</sub>	PM <sub>10</sub> <sub>5</sub>	PM <sub>2.5</sub> <sub>2</sub>	NO <sub>2</sub> <sub>6</sub>	SO <sub>2</sub> <sub>10</sub>	
06-07-2025	07-07-2025	275	168	54	17	13	Rainy sky / Light breeze
21-07-2025	22-07-2025	258	147	42	13	11	Cloudy sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY HEALTH CENTER   KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	PM <sub>10</sub> <sub>5</sub>	PM <sub>2.5</sub> <sub>2</sub>	NO <sub>2</sub> <sub>6</sub>	SO <sub>2</sub> <sub>10</sub>		
01-07-2025	02-07-2025	80	29	8	BDL	Rainy sky / Light breeze	
02-07-2025	03-07-2025	77	27	7	BDL	Rainy sky / Light breeze	
07-07-2025	08-07-2025	79	28	8	BDL	Rainy sky / Light breeze	
08-07-2025	09-07-2025	81	31	10	BDL	Rainy sky / Light breeze	
13-07-2025	14-07-2025	76	25	6	BDL	Cloudy sky / Calm	
18-07-2025	19-07-2025	82	32	10	BDL	Cloudy sky / Calm	
19-07-2025	20-07-2025	84	33	11	BDL	Cloudy sky / Calm	
24-07-2025	25-07-2025	80	28	7	BDL	Cloudy sky / Calm	
25-07-2025	26-07-2025	81	30	9	BDL	Rainy sky / Calm	
30-07-2025	31-07-2025	87	35	12	10	Cloudy sky / Calm	
NAAQS, 2009		100	60	80	80		

AMBARA VILLAGE   KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	PM <sub>10</sub> <sub>5</sub>	PM <sub>2.5</sub> <sub>2</sub>	NO <sub>2</sub> <sub>6</sub>	SO <sub>2</sub> <sub>10</sub>		
01-07-2025	02-07-2025	81	32	9	BDL	Rainy sky / Light breeze	
02-07-2025	03-07-2025	78	28	7	BDL	Rainy sky / Light breeze	
07-07-2025	08-07-2025	75	26	6	BDL	Rainy sky / Light breeze	
08-07-2025	09-07-2025	79	30	8	BDL	Rainy sky / Light breeze	
13-07-2025	14-07-2025	83	33	12	BDL	Cloudy sky / Calm	
17-07-2025	18-07-2025	77	28	6	BDL	Cloudy sky / Calm	
22-07-2025	23-07-2025	80	31	11	BDL	Cloudy sky / Calm	
23-07-2025	24-07-2025	82	33	12	10	Cloudy sky / Calm	
28-07-2025	29-07-2025	84	35	13	11	Cloudy sky / Calm	
29-07-2025	30-07-2025	85	36	14	11	Cloudy sky / Calm	
NAAQS, 2009		100	60	80	80		

  
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**FUGITIVE DUST MONITORING**


TEST REQUIRED	SPM: IS 5182 Part-4, PM-10: IS-5182 Part 23, PM2.5: IS 5182 Part 24		
SAMPLE DESCRIPTION	Air sample(Fugitive)		
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:	16-07-25 TO 15-08-25	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )		ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	
08-07-2025	09-07-2025	382	265	RAINY / LIGHT BREEZE

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )		ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	
06-07-2025	07-07-2025	340	227	RAINY / LIGHT BREEZE



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SAMPLE DESCRIPTION	Water sample		
Test Required	pH: IS 3025 -(Part 11), TSS: IS 3025-(Part 17), COD: APHA (24th Edition) 5220 C , O & G: IS 3025-(Part 39) & BOD: IS 3025 (Part 44)		
SAMPLING METHOD	LSOP 5	PERIOD OF PERFORMANCE OF LAB ACTIVITIES :	16-07-25 TO 15-08-25

MINE WATER DISCHARGE: KAOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
07-07-2025	3.91	15	24	BDL
21-07-2025	4.70	17	28	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10

*J. Shetty*

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7182
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**NOISE LEVEL MONITORING DATA**

SAMPLE DESCRIPTION	NOISE SAMPLE
Test Required	CPCB PROTOCOL FOR AMBIENT NOISE MEASUREMENT
SAMPLING METHOD	LSOP 6

FAN HOUSE:		KMUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
JULY'25	12-07-2025	64.6	62.5
JULY'25	26-07-2025	63.5	60.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(MOHAN MAORI):		KMUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
JULY'25	12-07-2025	43.2	41.0
JULY'25	26-07-2025	42.2	40.3
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>



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## ENVIRONMENTAL MONITORING REPORT

# MOHAN/ MAORI UG

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APRIL 2025

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/APRIL-25/72	DATE OF ISSUE	25-05-2025
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
TEST REQUIRED	SPM: IS 5182 Part-4, PM-10: IS-5182 Part 23, PM2.5: IS 5182 Part 24, NO2: IS 5182 Part-06, SO2:IS 5182 Part-2		
SAMPLE DESCRIPTION	AIR SAMPLE	SAMPLING PLAN :	LQR 47
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:		16-04-25 TO 15-05-25

SAM OFFICE KMUA1							
DATE(dd:mm:yy) ) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
14-04-2025	15-04-2025	320	203	57	17	15	Clear sky / Calm
23-04-2025	24-04-2025	335	220	59	19	17	Clear sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	


PIT OFFICE MOHAN KMUA2							
DATE(dd:mm:yy) ) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
07-04-2025	08-04-2025	311	195	55	16	14	Clear sky / Calm
23-04-2025	24-04-2025	325	210	58	18	16	Clear sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

COLONY HEALTH CENTER KMUA3							
DATE(dd:mm:yy) ) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
FROM	TO	5	2	6	10		
03-04-2025	04-04-2025	80	22	7	BDL	Clear sky / Calm	
04-04-2025	05-04-2025	83	25	8	BDL	Clear sky / Calm	
10-04-2025	11-04-2025	85	27	9	BDL	Clear sky / Calm	
11-04-2025	12-04-2025	87	29	10	BDL	Clear sky / Calm	
18-04-2025	19-04-2025	90	31	11	BDL	Clear sky / Calm	
19-04-2025	20-04-2025	93	33	13	10	Clear sky / Calm	
28-04-2025	29-04-2025	91	32	10	BDL	Clear sky / Calm	
29-04-2025	30-04-2025	92	31	12	BDL	Clear sky / Calm	
NAAQS, 2009		<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>		

AMBARA VILLAGE KMUA4							
DATE(dd:mm:yy) ) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
FROM	TO	5	2	6	10		
03-04-2025	04-04-2025	81	23	7	BDL	Clear sky / Calm	
04-04-2025	05-04-2025	84	27	7	BDL	Clear sky / Calm	
10-04-2025	11-04-2025	86	29	9	BDL	Clear sky / Calm	
11-04-2025	12-04-2025	85	26	7	BDL	Clear sky / Calm	
18-04-2025	19-04-2025	88	28	8	BDL	Clear sky / Calm	
19-04-2025	20-04-2025	90	32	10	BDL	Clear sky / Calm	
28-04-2025	29-04-2025	93	31	12	10	Clear sky / Calm	
29-04-2025	30-04-2025	95	34	13	11	Clear sky / Calm	
NAAQS, 2009		<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>		

*J. Shy*

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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**FUGITIVE DUST MONITORING**


TEST REQUIRED	SPM: IS 5182 Part-4, PM-10: IS-5182 Part 23, PM2.5: IS 5182 Part 24		
SAMPLE DESCRIPTION	Air sample(Fugitive)		
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:	16-04-25 TO 15-05-25	

MANAGER OFFICE CHP KAUF1				
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )		ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	
FROM	TO	s	s	
28-04-2025	29-04-2025	367	252	Clear Sky Calm

PALACHURI KAUF2				
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )		ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	
FROM	TO	s	s	
29-04-2025	30-04-2025	328	212	Clear Sky Calm



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SAMPLE DESCRIPTION	Water sample		
Test Required	pH: IS 3025 -Part 11,TSS: IS 3025-Part 17,COD: APHA (24th Edition) 5220 C ,O &G: IS 3025-Part 39 & BOD: IS 3025 (Part 44)		
SAMPLING METHOD	LSOP 5	PERIOD OF PERFORMANCE OF LAB ACTIVITIES :	16-04-25 TO 15-05-25

MINE WATER DISCHARGE: KAOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
07-04-2025	4.73	34	48	BDL
28-04-2025	4.64	30	44	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10

*J. Chong*

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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**NOISE LEVEL MONITORING DATA**

SAMPLE DESCRIPTION	NOISE SAMPLE
Test Required	CPCB PROTOCOL FOR AMBIENT NOISE MEASUREMENT
SAMPLING METHOD	LSOP 6

FAN HOUSE:		KMUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
APRIL'25	08-04-2025	69.9	67.3
APRIL'25	28-04-2025	70.3	68.2
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(MOHAN MAORI):		KMUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
APRIL'25	08-04-2025	43.9	40.7
APRIL'25	28-04-2025	43.6	41.2
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

  
Yogesh Pidurkar  
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## ENVIRONMENTAL MONITORING REPORT

# MOHAN/ MAORI UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4094423067



OCTOBER 2025

Environment Laboratory  
NABL Accredited vide Cert. No. TC-7102  
CMPDI  
REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/OCT-25/72	DATE OF ISSUE	25.11.2025
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
TEST REQUIRED	SPM: IS 5182 (Part-4), PM-10: IS-5182 (Part 23), PM2.5: IS 5182 (Part 24), NO <sub>2</sub> : IS 5182 (Part-06), SO <sub>2</sub> :IS 5182 (Part-2)		
SAMPLE DESCRIPTION	AIR SAMPLE	SAMPLING PLAN :	LQR 47
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:		16-10-25 TO 15-11-25

SAM OFFICE   KMUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
04.10.2025	05.10.2025	289	158	48	18	12	Cloudy sky / Light breeze
19.10.2025	20.10.2025	323	193	57	24	16	Clear sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH OCTember 2000		600	300	-	120	120	

PIT OFFICE MOHAN   KMUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
04.10.2025	05.10.2025	309	186	53	20	15	Cloudy sky / Light breeze
19.10.2025	20.10.2025	298	179	50	17	13	Clear sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH OCTember 2000		600	300	-	120	120	

COLONY HEALTH CENTER   KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
08.10.2025	09.10.2025	71	25	10	BDL	Cloudy sky / Light breeze	
09.10.2025	10.10.2025	65	22	9	BDL	Cloudy sky / Light breeze	
13.10.2025	14.10.2025	77	26	11	BDL	Cloudy sky / Light breeze	
17.10.2025	18.10.2025	80	28	13	10	Cloudy sky / Calm	
22.10.2025	23.10.2025	69	23	8	BDL	Cloudy sky / Calm	
23.10.2025	24.10.2025	82	30	14	11	Cloudy sky / Calm	
28.10.2025	29.10.2025	83	33	16	12	Cloudy sky / Calm	
29.10.2025	30.10.2025	74	27	9	BDL	Cloudy sky / Calm	
NAAQS, 2009		100	60	80	80		

AMBARA VILLAGE   KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
06.10.2025	07.10.2025	81	30	13	11	Cloudy sky / Light breeze	
07.10.2025	08.10.2025	75	26	7	BDL	Cloudy sky / Light breeze	
11.10.2025	12.10.2025	67	22	7	BDL	Cloudy sky / Light breeze	
12.10.2025	13.10.2025	76	27	8	BDL	Cloudy sky / Light breeze	
20.10.2025	21.10.2025	69	23	7	BDL	Cloudy sky / Calm	
21.10.2025	22.10.2025	64	20	6	BDL	Cloudy sky / Calm	
26.10.2025	27.10.2025	78	28	12	10	Cloudy sky / Calm	
27.10.2025	28.10.2025	66	24	8	BDL	Cloudy sky / Calm	
NAAQS, 2009		100	60	80	80		

  
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**FUGITIVE DUST MONITORING**


TEST REQUIRED	SPM: IS 5182 Part-4, PM-10: IS-5182 Part 23, PM2.5: IS 5182 Part 24		
SAMPLE DESCRIPTION	Air sample(Fugitive)		
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:	16-10-25 TO 15-11-25	

MANAGER OFFICE CHP KAUF1				
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )		ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	
FROM	TO	S	S	
30.10.2025	31.10.2025	386	272	CLEAR / CALM

PALACHURI KAUF2				
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )		ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	
FROM	TO	S	S	
30.10.2025	31.10.2025	372	265	CLEAR / CALM



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SAMPLE DESCRIPTION	Water sample		
Test Required	pH: IS 3025 -(Part 11), TSS: IS 3025-(Part 17), COD: APHA (24th Edition) 5220 C , O & G: IS 3025-(Part 39) & BOD: IS 3025 (Part 44)		
SAMPLING METHOD	LSOP 5	PERIOD OF PERFORMANCE OF LAB ACTIVITIES :	16-10-25 TO 15-11-25

MINE WATER DISCHARGE: KAOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
07.10.2025	4.42	17	28	BDL
20.10.2025	4.13	19	32	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

SAMPLE DESCRIPTION	NOISE SAMPLE
Test Required	CPCB PROTOCOL FOR AMBIENT NOISE MEASUREMENT
SAMPLING METHOD	LSOP 6

FAN HOUSE:		KMUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
		20	20
OCT'25	11.10.2025	68.3	65.5
OCT'25	29.10.2025	68.4	66.7
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(MOHAN MAORI):		KMUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
		20	20
OCT'25	11.10.2025	43.4	41.6
OCT'25	29.10.2025	42.3	39.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

  
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## ENVIRONMENTAL MONITORING REPORT

# MOHAN/ MAORI UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4094423067



NOVEMBER 2025

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/NOV-25/72	DATE OF ISSUE	24-12-2025
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
TEST REQUIRED	SPM: IS 5182 (Part-4), PM-10: IS-5182 (Part 23), PM2.5: IS 5182 (Part 24), NO2: IS 5182 (Part-06), SO2:IS 5182 (Part-2)		
SAMPLE DESCRIPTION	AIR SAMPLE	SAMPLING PLAN :	LQR 47
SAMPLING METHOD : L SOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:		16-11-25 TO 15-12-25


SAM OFFICE KMUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM <sub>5</sub>	PM <sub>10</sub> <sub>5</sub>	PM <sub>2.5</sub> <sub>2</sub>	NO <sub>2</sub> <sub>6</sub>	SO <sub>2</sub> <sub>10</sub>	
09-11-2025	10-11-2025	265	167	46	14	11	Clear sky / Calm
29-11-2025	30-11-2025	274	177	52	16	13	Cloudy sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH NOVember 2000		600	300	-	120	120	

PIT OFFICE MOHAN KMUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM <sub>5</sub>	PM <sub>10</sub> <sub>5</sub>	PM <sub>2.5</sub> <sub>2</sub>	NO <sub>2</sub> <sub>6</sub>	SO <sub>2</sub> <sub>10</sub>	
09-11-2025	10-11-2025	283	183	56	18	14	Clear sky / Calm
29-11-2025	30-11-2025	259	156	40	12	10	Cloudy sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH NOVember 2000		600	300	-	120	120	

COLONY HEALTH CENTER KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	PM <sub>10</sub> <sub>5</sub>	PM <sub>2.5</sub> <sub>2</sub>	NO <sub>2</sub> <sub>6</sub>	SO <sub>2</sub> <sub>10</sub>		
06-11-2025	07-11-2025	66	24	6	BDL	Cloudy sky / Calm	
07-11-2025	08-11-2025	70	29	8	BDL	Cloudy sky / Calm	
12-11-2025	13-11-2025	75	28	9	BDL	Clear sky / Calm	
13-11-2025	14-11-2025	69	25	7	BDL	Clear sky / Calm	
20-11-2025	21-11-2025	80	33	10	BDL	Cloudy sky / Calm	
21-11-2025	22-11-2025	77	31	9	BDL	Cloudy sky / Calm	
26-11-2025	27-11-2025	82	35	11	BDL	Cloudy sky / Calm	
27-11-2025	28-11-2025	79	32	9	BDL	Cloudy sky / Calm	
NAAQS, 2009		100	60	80	80		

AMBARA VILLAGE KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	PM <sub>10</sub> <sub>5</sub>	PM <sub>2.5</sub> <sub>2</sub>	NO <sub>2</sub> <sub>6</sub>	SO <sub>2</sub> <sub>10</sub>		
04-11-2025	05-11-2025	73	28	8	BDL	Cloudy sky / Calm	
05-11-2025	06-11-2025	68	25	7	BDL	Cloudy sky / Calm	
10-11-2025	11-11-2025	65	23	6	BDL	Clear sky / Calm	
11-11-2025	12-11-2025	74	29	9	BDL	Clear sky / Calm	
18-11-2025	19-11-2025	83	32	12	BDL	Cloudy sky / Calm	
19-11-2025	20-11-2025	78	30	10	BDL	Cloudy sky / Calm	
24-11-2025	25-11-2025	85	34	13	BDL	Cloudy sky / Calm	
25-11-2025	26-11-2025	67	27	7	BDL	Cloudy sky / Calm	
NAAQS, 2009		100	60	80	80		

*J. Gay*  
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SAMPLE DESCRIPTION	Water sample		
Test Required	pH: IS 3025 -(Part 11), TSS: IS 3025-(Part 17), COD: APHA (24th Edition) 5220 C, O & G: IS 3025-(Part 39) & BOD: IS 3025 (Part 44)		
SAMPLING METHOD	LSOP 5	PERIOD OF PERFORMANCE OF LAB ACTIVITIES :	16-11-25 TO 15-12-25

MINE WATER DISCHARGE: KAOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
09-11-2025	4.79	25	36	BDL
27-11-2025	5.11	28	40	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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**NOISE LEVEL MONITORING DATA**

SAMPLE DESCRIPTION	NOISE SAMPLE
Test Required	CPCB PROTOCOL FOR AMBIENT NOISE MEASUREMENT
SAMPLING METHOD	LSOP 6

FAN HOUSE:		KMUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
		20	20
	DETECTION LIMIT	20	20
NOV'25	11-11-2025	67.3	65.5
NOV'25	26-11-2025	62.2	59.3
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(MOHAN MAORI):		KMUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
		20	20
	DETECTION LIMIT	20	20
NOV'25	11-11-2025	42.3	40.5
NOV'25	26-11-2025	43.3	41.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

  
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## ENVIRONMENTAL MONITORING REPORT

# MOHAN/ MAORI UG

KANHAN AREA

WESTERN COALFIELDS LTD.

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DECEMBER 2025

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/DEC-25/72	DATE OF ISSUE	25-01-2026
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
TEST REQUIRED	SPM: IS 5182 (Part-4), PM-10: IS-5182 (Part 23), PM2.5: IS 5182 (Part 24), NO2: IS 5182 (Part-06), SO2:IS 5182 (Part-2)		
SAMPLE DESCRIPTION	AIR SAMPLE	SAMPLING PLAN :	LQR 47
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:		16-12-25 TO 15-01-26


SAM OFFICE KMUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM <sub>5</sub>	PM <sub>10</sub> <sub>5</sub>	PM <sub>2.5</sub> <sub>2</sub>	NO <sub>2</sub> <sub>6</sub>	SO <sub>2</sub> <sub>10</sub>	
14-12-2025	15-12-2025	288	182	51	22	16	Clear sky / Calm
27-12-2025	28-12-2025	293	177	56	24	18	Cloudy sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH DECEMBER 2000		600	300	-	120	120	

PIT OFFICE MOHAN KMUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM <sub>5</sub>	PM <sub>10</sub> <sub>5</sub>	PM <sub>2.5</sub> <sub>2</sub>	NO <sub>2</sub> <sub>6</sub>	SO <sub>2</sub> <sub>10</sub>	
14-12-2025	15-12-2025	278	183	46	20	15	Clear sky / Calm
22-12-2025	23-12-2025	269	156	41	18	14	Cloudy sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH DECEMBER 2000		600	300	-	120	120	

COLONY HEALTH CENTER KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	PM <sub>10</sub> <sub>5</sub>	PM <sub>2.5</sub> <sub>2</sub>	NO <sub>2</sub> <sub>6</sub>	SO <sub>2</sub> <sub>10</sub>		
02-12-2025	03-12-2025	80	29	10	BDL	Cloudy sky / Calm	
03-12-2025	04-12-2025	75	27	9	BDL	Cloudy sky / Calm	
09-12-2025	10-12-2025	78	28	8	BDL	Clear sky / Calm	
10-12-2025	11-12-2025	73	26	8	BDL	Clear sky / Calm	
17-12-2025	18-12-2025	70	24	9	BDL	Clear sky / Calm	
18-12-2025	19-12-2025	84	35	13	11	Clear sky / Calm	
23-12-2025	24-12-2025	85	36	14	12	Clear sky / Calm	
24-12-2025	25-12-2025	77	27	8	BDL	Clear sky / Calm	
NAAQS, 2009		100	60	80	80		

AMBARA VILLAGE KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	PM <sub>10</sub> <sub>5</sub>	PM <sub>2.5</sub> <sub>2</sub>	NO <sub>2</sub> <sub>6</sub>	SO <sub>2</sub> <sub>10</sub>		
04-12-2025	05-12-2025	83	33	12	10	Cloudy sky / Calm	
05-12-2025	06-12-2025	85	34	13	11	Cloudy sky / Calm	
11-12-2025	12-12-2025	82	30	10	BDL	Clear sky / Calm	
12-12-2025	13-12-2025	79	27	8	BDL	Clear sky / Calm	
19-12-2025	20-12-2025	75	25	7	BDL	Clear sky / Calm	
20-12-2025	21-12-2025	76	24	7	BDL	Clear sky / Calm	
25-12-2025	26-12-2025	78	28	9	BDL	Clear sky / Calm	
26-12-2025	27-12-2025	81	31	11	BDL	Clear sky / Calm	
NAAQS, 2009		100	60	80	80		

*J. Gay*  
Analysed by

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7182
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SAMPLE DESCRIPTION	Water sample		
Test Required	pH: IS 3025 -(Part 11), TSS: IS 3025-(Part 17), COD: APHA (24th Edition) 5220 C, O & G: IS 3025-(Part 39) & BOD: IS 3025 (Part 44)		
SAMPLING METHOD	LSOP 5	PERIOD OF PERFORMANCE OF LAB ACTIVITIES :	16-12-25 TO 15-01-26

MINE WATER DISCHARGE: KAOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
14-12-2025	3.57	15	24	BDL
28-12-2025	3.45	17	28	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

SAMPLE DESCRIPTION	NOISE SAMPLE
Test Required	CPCB PROTOCOL FOR AMBIENT NOISE MEASUREMENT
SAMPLING METHOD	LSOP 6

FAN HOUSE:		KMUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
		20	20
	DETECTION LIMIT	20	20
DEC'25	12-12-2025	70.9	69.5
DEC'25	29-12-2025	68.3	66.6
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(MOHAN MAORI):		KMUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
		20	20
	DETECTION LIMIT	20	20
DEC'25	12-12-2025	43.1	40.2
DEC'25	29-12-2025	42.2	39.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

  
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## ENVIRONMENTAL MONITORING REPORT

# MOHAN/ MAORI UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4094423067



JANUARY 2026

Environment Laboratory  
NABL Accredited vide Cert. No. TC-7102  
CMPDI  
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JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/JAN-26/72	DATE OF ISSUE	25-02-2026
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
TEST REQUIRED	SPM: IS 5182 (Part-4), PM-10: IS-5182 (Part 23), PM2.5: IS 5182 (Part 24), NO2: IS 5182 (Part-06), SO2:IS 5182 (Part-2)		
SAMPLE DESCRIPTION	AIR SAMPLE	SAMPLING PLAN :	LQR 47
SAMPLING METHOD : L SOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:		16-01-26 TO 15-02-26

SAM OFFICE KMUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
08-01-2026	09-01-2026	311	190	55	23	18	Cloudy sky / Calm
20-01-2026	21-01-2026	288	176	52	20	16	Cloudy sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH DEcember 2000		600	300	-	120	120	

PIT OFFICE MOHAN KMUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
08-01-2026	09-01-2026	299	188	53	22	17	Cloudy sky / Calm
20-01-2026	21-01-2026	323	206	58	26	19	Cloudy sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH DEcember 2000		600	300	-	120	120	

COLONY HEALTH CENTER KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
05-01-2026	06-01-2026	85	35	23	12	BDL	Cloudy sky / Calm
06-01-2026	07-01-2026	82	32	17	BDL	BDL	Cloudy sky / Calm
11-01-2026	12-01-2026	84	34	18	BDL	BDL	Cloudy sky / Calm
12-01-2026	13-01-2026	80	29	16	BDL	BDL	Cloudy sky / Calm
16-01-2026	17-01-2026	77	27	14	BDL	BDL	Cloudy sky / Calm
17-01-2026	18-01-2026	76	25	12	BDL	BDL	Cloudy sky / Calm
23-01-2026	24-01-2026	81	31	16	BDL	BDL	Cloudy sky / Calm
24-01-2026	25-01-2026	83	33	19	11	BDL	Cloudy sky / Calm
29-01-2026	30-01-2026	78	28	12	BDL	BDL	Cloudy sky / Calm
30-01-2026	31-01-2026	75	26	10	BDL	BDL	Cloudy sky / Calm
NAAQS, 2009		100	60	80	80		

AMBARA VILLAGE KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
03-01-2026	04-01-2026	86	36	24	13	BDL	Cloudy sky / Calm
04-01-2026	05-01-2026	83	32	18	BDL	BDL	Cloudy sky / Calm
09-01-2026	10-01-2026	82	31	16	BDL	BDL	Cloudy sky / Calm
10-01-2026	11-01-2026	80	28	14	BDL	BDL	Cloudy sky / Calm
16-01-2026	17-01-2026	81	32	17	BDL	BDL	Cloudy sky / Calm
17-01-2026	18-01-2026	77	26	9	BDL	BDL	Cloudy sky / Calm
21-01-2026	22-01-2026	78	29	8	BDL	BDL	Cloudy sky / Calm
22-01-2026	23-01-2026	84	35	20	12	BDL	Cloudy sky / Calm
27-01-2026	28-01-2026	80	30	15	BDL	BDL	Cloudy sky / Calm
28-01-2026	29-01-2026	79	29	9	BDL	BDL	Cloudy sky / Calm
NAAQS, 2009		100	60	80	80		

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**FUGITIVE DUST MONITORING**

TEST REQUIRED	SPM: IS 5182 Part-4, PM-10: IS-5182 Part 23, PM2.5: IS 5182 Part 24		
SAMPLE DESCRIPTION	Air sample(Fugitive)		
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:	16-01-26 TO 15-02-26	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )		ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	
03-01-2026	04-01-2026	378	266	Cloudy sky / Calm

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )		ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	
04-01-2026	05-01-2026	359	152	Cloudy sky / Calm



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SAMPLE DESCRIPTION	Water sample		
Test Required	pH: IS 3025 -(Part 11), TSS: IS 3025-(Part 17), COD: APHA (24th Edition) 5220 C, O & G: IS 3025-(Part 39) & BOD: IS 3025 (Part 44)		
SAMPLING METHOD	LSOP 5	PERIOD OF PERFORMANCE OF LAB ACTIVITIES :	16-01-26 TO 15-02-26

MINE WATER DISCHARGE: KAOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
08-01-2026	3.65	28	44	BDL
19-01-2026	4.71	22	28	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

SAMPLE DESCRIPTION	NOISE SAMPLE
Test Required	CPCB PROTOCOL FOR AMBIENT NOISE MEASUREMENT
SAMPLING METHOD	LSOP 6

FAN HOUSE:		KMUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
JAN'26	10-01-2026	60.3	58.5
JAN'26	29-01-2026	61.3	58.8
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(MOHAN MAORI):		KMUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
JAN'26	10-01-2026	42.4	40.6
JAN'26	29-01-2026	42.2	39.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

  
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## ENVIRONMENTAL MONITORING REPORT

# MOHAN/ MAORI UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4094423067



FEBRUARY 2026

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/FEB-26/72	DATE OF ISSUE	25-03-2026
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
TEST REQUIRED	SPM: IS 5182 (Part-4), PM-10: IS-5182 (Part 23), PM2.5: IS 5182 (Part 24), NO <sub>2</sub> : IS 5182 (Part-06), SO <sub>2</sub> :IS 5182 (Part-2)		
SAMPLE DESCRIPTION	AIR SAMPLE	SAMPLING PLAN :	LQR 47
SAMPLING METHOD : LSP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:		16-02-26 TO 15-03-26


SAM OFFICE KMUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM <sub>5</sub>	PM <sub>10</sub> <sub>5</sub>	PM <sub>2.5</sub> <sub>2</sub>	NO <sub>2</sub> <sub>6</sub>	SO <sub>2</sub> <sub>10</sub>	
08-02-2026	09-02-2026	298	186	54	20	16	Cloudy sky / Calm
27-02-2026	28-02-2026	277	165	48	17	14	Cloudy sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH DEcember 2000		600	300	-	120	120	

PIT OFFICE MOHAN KMUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM <sub>5</sub>	PM <sub>10</sub> <sub>5</sub>	PM <sub>2.5</sub> <sub>2</sub>	NO <sub>2</sub> <sub>6</sub>	SO <sub>2</sub> <sub>10</sub>	
08-02-2026	09-02-2026	285	173	50	18	15	Cloudy sky / Calm
27-02-2026	28-02-2026	269	154	46	16	13	Cloudy sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH DEcember 2000		600	300	-	120	120	

COLONY HEALTH CENTER KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	PM <sub>10</sub> <sub>5</sub>	PM <sub>2.5</sub> <sub>2</sub>	NO <sub>2</sub> <sub>6</sub>	SO <sub>2</sub> <sub>10</sub>		
05-02-2026	06-02-2026	83	32	20	10	Cloudy sky / Calm	
06-02-2026	07-02-2026	80	29	18	BDL	Cloudy sky / Calm	
11-02-2026	12-02-2026	78	27	16	BDL	Cloudy sky / Calm	
12-02-2026	13-02-2026	82	30	19	BDL	Cloudy sky / Calm	
19-02-2026	20-02-2026	79	28	16	BDL	Cloudy sky / Calm	
20-02-2026	21-02-2026	75	26	15	BDL	Cloudy sky / Calm	
24-02-2026	25-02-2026	73	25	14	BDL	Cloudy sky / Calm	
25-02-2026	26-02-2026	74	24	13	BDL	Cloudy sky / Calm	
NAAQS, 2009		100	60	80	80		

AMBARA VILLAGE KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	PM <sub>10</sub> <sub>5</sub>	PM <sub>2.5</sub> <sub>2</sub>	NO <sub>2</sub> <sub>6</sub>	SO <sub>2</sub> <sub>10</sub>		
03-02-2026	04-02-2026	80	30	21	BDL	Cloudy sky / Calm	
04-02-2026	05-02-2026	77	28	17	BDL	Cloudy sky / Calm	
09-02-2026	10-02-2026	75	27	18	BDL	Cloudy sky / Calm	
10-02-2026	11-02-2026	84	31	22	12	Cloudy sky / Calm	
17-02-2026	18-02-2026	76	27	16	BDL	Cloudy sky / Calm	
18-02-2026	19-02-2026	74	25	15	BDL	Cloudy sky / Calm	
22-02-2026	23-02-2026	76	26	16	BDL	Cloudy sky / Calm	
23-02-2026	24-02-2026	72	23	15	BDL	Cloudy sky / Calm	
NAAQS, 2009		100	60	80	80		

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SAMPLE DESCRIPTION	Water sample		
Test Required	pH: IS 3025 -(Part 11), TSS: IS 3025-(Part 17), COD: APHA (24th Edition) 5220 C, O & G: IS 3025-(Part 39) & BOD: IS 3025 (Part 44)		
SAMPLING METHOD	LSOP 5	PERIOD OF PERFORMANCE OF LAB ACTIVITIES :	16-02-26 TO 15-03-26

MINE WATER DISCHARGE: KAOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
08-02-2026	6.22	26	36	BDL
27-02-2026	4.79	28	40	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

SAMPLE DESCRIPTION	NOISE SAMPLE
Test Required	CPCB PROTOCOL FOR AMBIENT NOISE MEASUREMENT
SAMPLING METHOD	LSOP 6

FAN HOUSE:		KMUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
		20	20
	DETECTION LIMIT	20	20
FEB'26	13-02-2026	61.4	59.6
FEB'26	26-02-2026	60.3	58.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(MOHAN MAORI):		KMUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
		20	20
	DETECTION LIMIT	20	20
FEB'26	13-02-2026	42.2	39.4
FEB'26	26-02-2026	43.2	41.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

  
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MARCH 2026

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/MAR-26/72	DATE OF ISSUE	25-04-2026
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
TEST REQUIRED	SPM: IS 5182 (Part-4), PM-10: IS-5182 (Part 23), PM2.5: IS 5182 (Part 24), NO2: IS 5182 (Part-06), SO2:IS 5182 (Part-2)		
SAMPLE DESCRIPTION	AIR SAMPLE	SAMPLING PLAN :	LQR 47
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:		16-03-26 TO 15-04-26


SAM OFFICE KMUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
07-03-2026	08-03-2026	318	204	50	22	18	Clear sky / Calm
21-03-2026	22-03-2026	326	212	56	24	20	Clear sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH DECember 2000		600	300	-	120	120	

PIT OFFICE MOHAN KMUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
07-03-2026	08-03-2026	290	198	44	16	14	Clear sky / Calm
21-03-2026	22-03-2026	303	201	48	18	16	Clear sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH DECember 2000		600	300	-	120	120	

COLONY HEALTH CENTER KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
		PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
FROM	TO	5	2	6	10		
04-03-2026	05-03-2026	74	25	14	BDL	Clear sky / Calm	
05-03-2026	06-03-2026	76	27	15	BDL	Clear sky / Calm	
11-03-2026	12-03-2026	80	29	17	BDL	Clear sky / Calm	
12-03-2026	13-03-2026	78	26	15	BDL	Clear sky / Calm	
18-03-2026	19-03-2026	82	30	18	12	Clear sky / Calm	
19-03-2026	20-03-2026	84	32	17	11	Clear sky / Calm	
24-03-2026	25-03-2026	80	31	16	BDL	Clear sky / Calm	
25-03-2026	26-03-2026	86	35	18	13	Clear sky / Calm	
NAAQS, 2009		100	60	80	80		

AMBARA VILLAGE KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
		PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
FROM	TO	5	2	6	10		
01-03-2026	02-03-2026	75	26	15	BDL	Clear sky / Calm	
02-03-2026	03-03-2026	80	32	16	10	Clear sky / Calm	
09-03-2026	10-03-2026	79	29	14	BDL	Clear sky / Calm	
10-03-2026	11-03-2026	81	33	17	11	Clear sky / Calm	
16-03-2026	17-03-2026	83	34	16	BDL	Clear sky / Calm	
17-03-2026	18-03-2026	85	35	18	12	Clear sky / Calm	
24-03-2026	25-03-2026	86	37	18	11	Clear sky / Calm	
25-03-2026	26-03-2026	84	34	16	BDL	Clear sky / Calm	
NAAQS, 2009		100	60	80	80		

*J. Singh*  
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SAMPLE DESCRIPTION	Water sample		
Test Required	pH: IS 3025 -(Part 11), TSS: IS 3025-(Part 17), COD: APHA (24th Edition) 5220 C, O & G: IS 3025-(Part 39) & BOD: IS 3025 (Part 44)		
SAMPLING METHOD	LSOP 5	PERIOD OF PERFORMANCE OF LAB ACTIVITIES :	16-03-26 TO 15-04-26

MINE WATER DISCHARGE: KAOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
07-03-2026	4.65	18	28	BDL
20-03-2026	4.40	22	32	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



Analysed by

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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**NOISE LEVEL MONITORING DATA**

SAMPLE DESCRIPTION	NOISE SAMPLE
Test Required	CPCB PROTOCOL FOR AMBIENT NOISE MEASUREMENT
SAMPLING METHOD	LSOP 6

FAN HOUSE:		KMUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
		20	20
	DETECTION LIMIT	20	20
MAR'26	11-03-2026	70.8	69.6
MAR'26	27-03-2026	70.3	68.9
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(MOHAN MAORI):		KMUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
		20	20
	DETECTION LIMIT	20	20
MAR'26	11-03-2026	43.2	40.6
MAR'26	27-03-2026	43.6	41.2
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

  
Yogesh Pidurkar  
Reviewed by

  
Amol Kamble  
Authorised by

1. This report cannot be reproduced in part or full without written of the management.
2. Laboratory activities are performed at the Laboratory permanent facility that is ground floor, Environment Lab, CMPDI RI-IV, Nagpur.
3. This report refers to the values related to the items tested.

\*\*\*\*\* End of report \*\*\*\*\*

**REPORT ON**  
**MONITORING OF GROUND WATER LEVEL**  
**OF**  
**Mohan (Maori) UG Expn.,**  
**KANHAN AREA**  
**WESTERN COALFIELDS LTD.**



**PERIOD- MAY 2025 (PRE MONSOON), AUG 2025 (MONSOON), NOV  
2025 (POST-MONSOON) & JAN 2026 (WINTER)**



**M/s Anacon Laboratories Pvt. Ltd., Nagpur**

**MoEF&CC (GOI) Recognized Laboratory**  
**ISO 9001:2015, ISO 14001:2015, ISO 45001:2018**  
Lab. & Consultancy: FP-34, 35, Food Park,  
MIDC, Butibori, Nagpur – 441122  
Mob: +91-9372960077  
Email: [ngp@anacon.in](mailto:ngp@anacon.in)  
Website: [www.anaconlaboratories.com](http://www.anaconlaboratories.com)  
Report No. ANqr /PD/20A/2023/199

**2025-26**

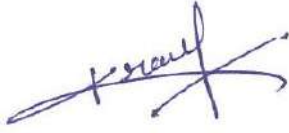
## Certificate

Groundwater level monitoring has been conducted with due diligence, and a comprehensive report on the monitoring of groundwater levels in all observation wells has been prepared as per the scope of work outlined in work order no. वेकोलि/मुख्यालय/पर्यावरण/14-L/1122-1148, dated 19.04.2025 for the Jan 2026 (Winter) Period.

The report includes the monitoring of groundwater levels and water quality analysis of observation wells pertaining to MOHAN (MAORI) UG EXPN., of the Kanhan area of Chhindwara district, M.P.

The groundwater level monitoring was meticulously carried out by Anacon Laboratories Pvt. Ltd., and the analysis of the samples was performed by Anacon Laboratories Pvt. Ltd., a NABL Accredited Laboratory. (NABL Certificate no. TC-12998)

Anacon Laboratories Pvt. Ltd. gratefully acknowledges the full cooperation rendered by the concerned WCL officials, which facilitated the timely completion of the project.



**Krupali Raut**  
(Geologist)



**Gyanchand Bohra**  
NABET Accredited EIA Expert  
for Hydrogeology & Geology

Nagpur  
Jan-2026



**(Dr. D. G. Garway)**  
Head of Organization  
Anacon Laboratories Pvt. Ltd., Nagpur

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TABLE/FIGURE	NAME OF SUB MINE PROJECT	GROUND WATER MONITORING DETAILS OF WELL	Page No.
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I-TABLE	MOHAN (MAORI) UG EXPN.,	PERIOD- MAY 2025 (PRE MONSOON), AUG 2025 (MONSOON), NOV 2025 (POST-MONSOON) & JAN 2026 (WINTER)	7
II-FIGURE	MOHAN (MAORI) UG EXPN.,	HYDROGRAPH	10
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## **INTRODUCTION**

Environment Department of Western Coalfield Limited (WCL), Nagpur has awarded the assignment engaged M/s Anacon Laboratories Pvt. Ltd, for conducting Ground water Monitoring (i.e. Borewell/Piezometer water level) for the year 2025-26 vide work order no. वेकोलि/मुख्यालय/पर्यावरण/14-L/1122-1148, dated 19.04.2025 for the Jan 2026 (Winter) Period

MOHAN (MAORI) UG EXPN., is located in Chhindwara district of Madhya Pradesh. All Mines are administered by Kanhan Area of Western Coalfields Limited. Ground water Level monitoring for all the mines have been done for the year 2025-26 i.e. **PERIOD- MAY 2025 (PRE MONSOON), AUG 2025 (MONSOON), NOV 2025(POST MONSOON) & JAN 2026 (WINTER).** **GENERAL HYDROGEOLOGICAL CONDITION**

The major part of the district is occupied by Deccan Trap, consisting of different lava flows whose thickness ranges between 7 to 21 m. The recent alluvium deposits are found at places along the Pench and the Kanhan rivers with thickness varying from 5.00 to 20.00 m. Alluvium comprises clayey material with intercalated layers of sand and gravels. Archaeans are exposed in parts of Sausar, Bichhua, Chhindwara, Jamai and Mohkhed blocks whereas the Coal bearing lower Gondwanas in parts of Jamai, Parasia and Jamai blocks. The upper Gondwanas occupy parts of Harrai and Tamia blocks. Ground water occurs under phreatic and semi-confined to confined conditions. Alluvium, weathered granites/gneisses, lower Gondwana sandstones, weathered, fractured and jointed massive basalts and vesicular basalts form the major phreatic aquifers; and weathered, fractured granites are noticed as main water-bearing zones at deeper levels.



*Gaurav*

**MOHAN (MAORI) UG EXPN.,**

**KANHAN AREA**

**WESTERN COALFIELDS LTD.**

**PERIOD- MAY 2025 (PRE MONSOON), AUG 2025 (MONSOON), NOV 2025 (POST MONSOON) & JAN 2026  
(WINTER)**



*Gaurav*

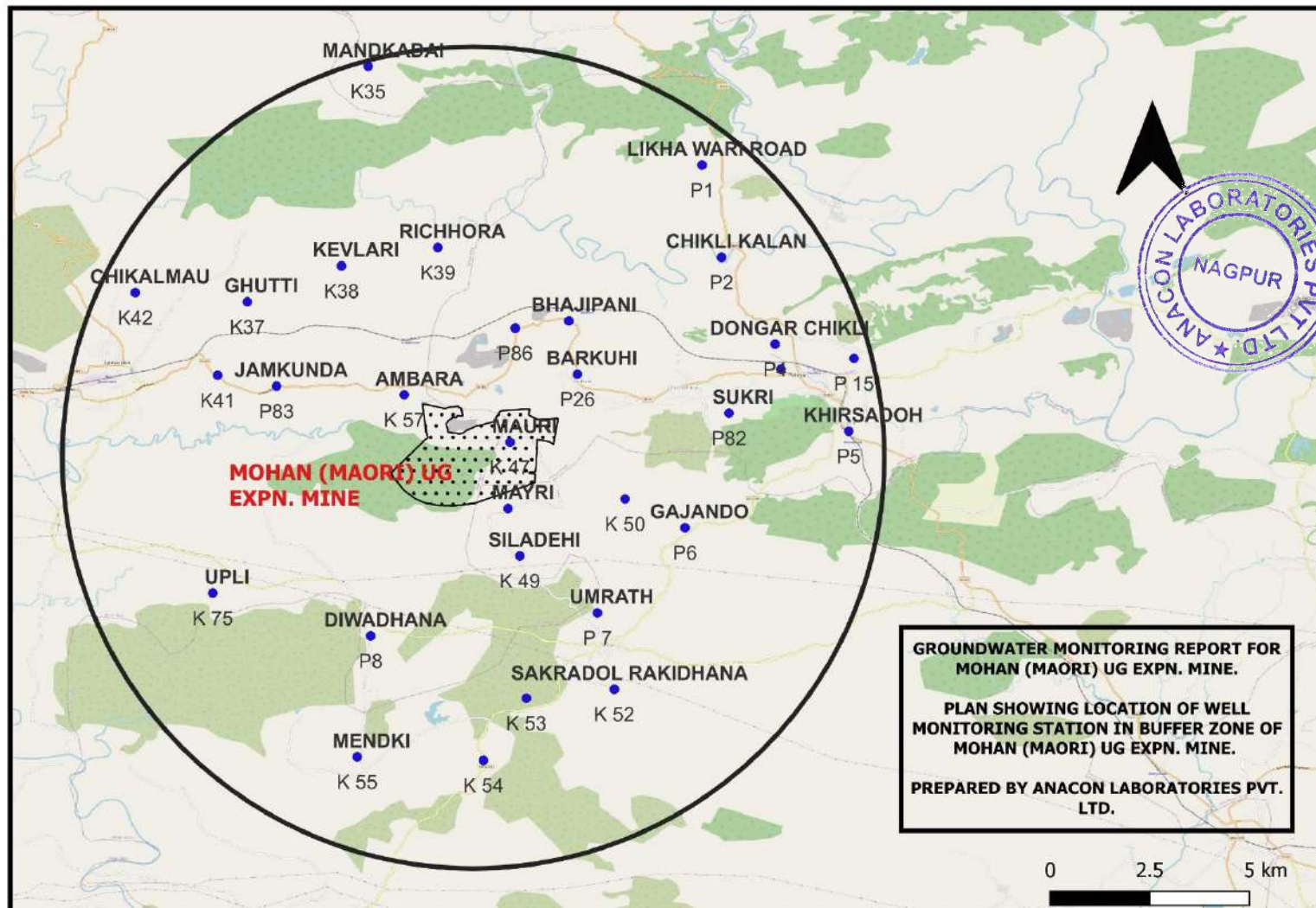


FIGURE I: GROUND WATER MONITORING STATION (OBSERVATION WELLS IN AND AROUND MOHAN (MAORI) UG EXPN.)



*Gaway*

**TABLE-I: Ground Water level Monitoring data from dugwells/piezometers in buffer zone Mohan (Maori) UG Exn., PANHAN AREA**

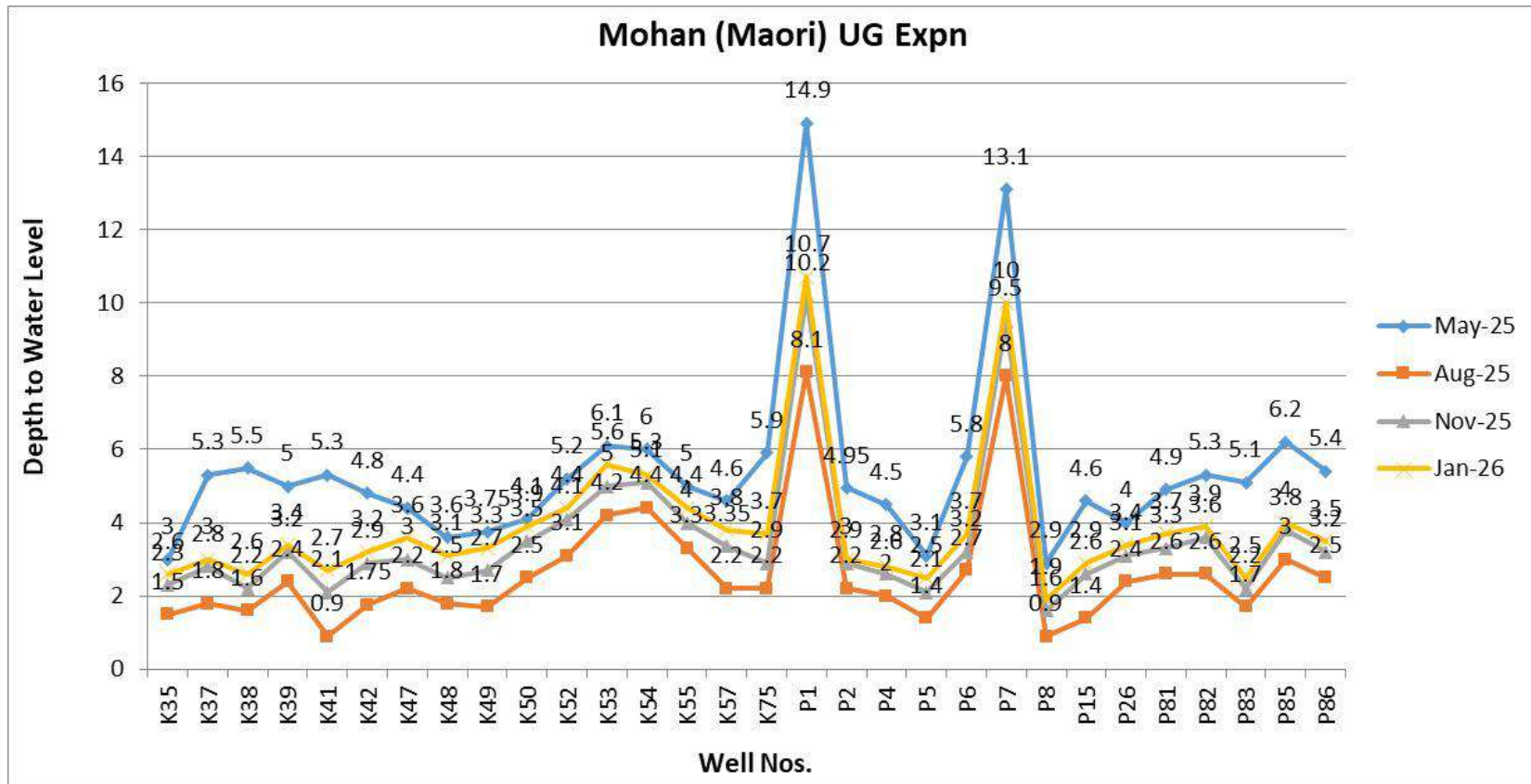
SR. NO	Well No. BA	Name of village	Well location	latitude	longitude	R.L. in m	Well depth in bgm	Utility	Well dia (m)	Height of measuring point (m agl)	Depth to Water(BGL-Below Ground Level), m				G/F
											May-25	Aug-25	Nov-25	Nov-26	
1	K35	MANDKADA I	In the openfield about 300 m away from village	22°16'0.714750 552555188"	78°39'20.1726 077323803"	722	5.20	Irrigation No pump	4.20	0.5	3.00	1.50	2.30	2.60	Basalt
2	K37	GHUTTI	Near LP school	22°12'34.46551 12699527"	78°37'34.3253 991360017"	726	10.00	Domestic	6.40	0.6	5.30	1.80	2.80	3.00	M/B sandstone
3	K38	KEVLARI	About 100 m NE of G.P office openfield of Shobharam	22°13'5.945839 27598649"	78°38'56.7109 874964173"	729	10.60	Irrigation	3.50	0	5.50	1.60	2.20	2.60	M/B S.stone with Dyke
4	K39	RICHHORA	Near Bajrang Mandir & Phulchand Mistra	22°13'22.01925 79841836"	78°40'21.0909 098510628"	690	9.50	Domestic	5.50	1.2	5.00	2.40	3.20	3.40	M/B sandstone
5	K41	SUKRI CHOWKI NALA	In the openfield Near Nala on Parasis-Jurdeo Road	22°11'30.11434 03543605"	78°37'8.20198 943747972"	650	10.20	Irrigation	5.80	0	5.30	0.90	2.10	2.70	M/B sandstone
6	K42	CHIKALMAU	In the centre of village Near house HARICHANDRA DHURVE	22°12'42.44881 04302284"	78°35'56.0797 409136397"	685	8.50	Domestic	3.20	0.7	4.80	1.75	2.90	3.20	M/B sandstone
7	K 47	MAURI	About 100 m East of Hingula Mandir near O/C patch Mauri	22°10'31.42328 64237184"	78°41'24.3711 039009065"	745	7.90	Domestic	6.10	0.75	4.40	2.20	3.00	3.60	Barakar sandstone
8	K 48	MAYRI	Near Milk Dairy Depo. House of Roshan Vishkarma single house	22°9'33.390867 3272873"	78°41'22.6683 189291429"	785	4.70	Irrigation	4.01	0.8	3.60	1.80	2.50	3.10	Barakar sandstone
9	K 49	SILADEHI	Outside village towards Umreth Road Back of house of Panchu Lal	22°8'51.883333 3720849"	78°41'32.9329 836201077"	768	10.50	Irrigation	5.20	0	3.75	1.70	2.70	3.30	Barakar sandstone
10	K 50	GAJANDO MINE (Field Area)	In the field of Jaipal power 100 m from road to mine	22°9'41.741408 730195"	78°43'5.03494 982437016"	695	9.10	Irrigation	6.10	0.1	4.10	2.50	3.50	3.90	Barakar sandstone
11	K 52	SAKRADOL RAKIDHANA	Side of Road well mark on Electric pole	22°6'55.041630 3934995"	78°42'55.6653 421951911"	705	13.70	Irrigation	6.20	GL	5.20	3.10	4.10	4.40	Metamor phics

SR. NO	Well No. BA	Name of village	Well location	latitude	longitude	R.L. in m	Well depth in bgm	Utility	Well dia (m)	Height of measuring point (m agl)	Depth to Water(BGL-Below Ground Level), m				G/F
											May-25	Aug-25	Nov-25	Nov-26	
12	K 53	CHOPAN TEKRI	Near Temple on side of Road & nala PWS well	22°6'47.251217 8317317"	78°41'38.6447 758306667"	706	17.00	Domestic	5.10	GL	6.10	4.20	5.00	5.60	Motur
13	K 54	GHUGHRI	CENTER OF THE VILLAGE	22°5'52.761904 7850436"	78°41'0.98389 7608110684"	705	14.10	Irrigation	5.80	0.35	6.00	4.40	5.10	5.30	Metamorphics
14	K 55	MENDKI	Out side village Back of house of Bargu Maskole	22°5'55.749439 2382893"	78°39'10.4406 601194943"	778	13.60	Irrigation	5.00	0.5	5.00	3.30	4.00	4.40	Motur
15	K 57	AMBARA	Side of Road to Parasia about 100 south in the field of Farukh Bhai	22°11'12.98121 36862654"	78°39'51.7314 514040981"	745	12.40	Irrigation	7.50	1	4.60	2.20	3.35	3.80	Barakar sandstone
16	K 75	UPLI	OPEN FIELD	22°8'19.25"	78°37'3.98"	690	12.60	Domestic	5.60	0.9	5.90	2.20	2.90	3.70	M/B SANDSTONE
17	P1	LIKHA WARI ROAD	West of Parasia Pipariya Road near house of Dhanraj Yadav	22°14'34.34945 46067419"	78°44'12.5816 304266813"	771	29.00		2.50	0.5	14.90	8.10	10.20	10.70	Motur
18	P2	CHIKLI KALAN	In the pump house right hand side of the road when moving towards pagara village.	22°13'13.47510 52259759"	78°44'29.6028 780918313"	773	12.80	Domestic	3.00	0.1	4.95	2.20	2.90	3.00	Motur
19	P4	DONGAR CHIKLI	West of Parasia pipariya Road in the low lying field opp. Bhimsen Majar	22°11'57.28463 54410274"	78°45'16.5489 205025779"	745	9.70	Domestic	3.75	0.3	4.50	2.00	2.60	2.80	Motur
20	P5	KHIRSADOH	On East of chindwara Parasia Road in the Bunflow of Mr Mehta	22°10'41.11079 22204636"	78°46'20.9609 827885763"	765	5.20	Domestic	4.20	0.5	3.10	1.40	2.10	2.50	Motur
21	P6	GAJANDO	On south of Mahadeo Puri-Gajando Road in open field of Ram Prasad Pawar	22°9'16.605301 2800262"	78°43'57.5759 100620712"	759	13.00	Irrigation	5.00	GL	5.80	2.70	3.20	3.70	Motur

SR. NO	Well No. BA	Name of village	Well location	latitude	longitude	R.L. in m	Well depth in bgm	Utility	Well dia (m)	Height of measuring point (m agl)	Depth to Water(BGL-Below Ground Level), m				G/F
											May-25	Aug-25	Nov-25	Nov-26	
22	P 7	UMRATH	About 1 km from Umrath on Sila Devi Road in openfield of Narayan pawar	22°8'1.9864976 2874084"	78°42'40.8991 665576242"	760	26.70	Irrigation	6.00	0.3	13.10	8.00	9.50	10.00	BASALT
23	P8	DIWADHAN A	West of Umrath Sukri Road in openfield of Premchand Yadav	22°7'41.731374 2952288"	78°39'22.2108 219175856"	785	4.70	Domestic	4.01	0.8	2.90	0.90	1.60	1.90	BASALT
24	P 15	GANPATI U/G MINE	North of B.G. siding of Ganpati Mine WCL	22°11'44.83076 77024715"	78°46'25.6514 104302276"	811	9.60	Domestic	7.50	0.8	4.60	1.40	2.60	2.90	BASALT
25	P26	BARKUHI	Back side of officess club Pench Area out side of club boundary	22°11'31.10705 1465959"	78°42'23.4300 735044873"	776	8.70	Domestic	3.00	0.6	4.00	2.40	3.10	3.40	Motur
26	P81	DONGAR PARASIA	IN THE OWNER FIELD	22°11'35.52"	78°45'21.6"	760	11.50	Domestic	5.20	0.6	4.90	2.60	3.30	3.70	BASALT
27	P82	SUKRI	BACKSIDE OF KHEDAPATI MANDIR	22°10'56.88"	78°44'36.09"	780	8.60	Domestic	5.60	0.4	5.30	2.60	3.60	3.90	BASALT
28	P83	JAMKUNDA	ABOUT 350 METER FROM MAIN ROAD	22°11'20.59"	78°37'59.79"	710	14.50	Domestic	5.80	0.5	5.10	1.70	2.20	2.50	MOTUR
29	P85	BHAJIPANI	INSIDE ROAD ABOUT 300 MT	22°12'17.79"	78°42'15.89"	781	12.60	Domestic	4.00	0.75	6.20	3.00	3.80	4.00	Basalt
30	P86	EKLEHRA	ON THE JUNNARDEO PARASIA ROAD	22°12'11.41"	78°41'28.97"	825	11.40	Domestic	6.00	0.6	5.40	2.50	3.20	3.50	BASALT



*D. Gawari*



II-FIGURE: HYDROGRAPHS OF Mohan (Maori) UG Expn., KANHAN AREA



**K35-MANDKADAI**



**K37-GHUTTI**



**K38-KEVLARI**



**K39-RICHHORA**



**K41-SUKRI CHOWKI NALA**



**K42-CHIKALMAU**



**K47-MAURI**



**K48-MAYRI**



**K49-SILADEHI**



**K50-GAJANDO MINE**



**K52-SAKRADOL RAKIDHANA**



**k53-CHOPAN TEKRI**



**K54-GHUGHRI**



**K55-MENDKI**



**K57-AMBARA**



**K75-UPLI**



**P1-LIKHA WARI ROAD**



**P2-CHIKLI KALAN**



**P4-DONGAR CHIKLI**



**P5-KHIRSADOH**



**P6-GAJANDO**



**P7-UMRATH**



**P8-DIWADHANA**



**P15-GANPATI U/G MINE**



**P26-BARKUHI**



**P81- DONGAR PARASIA**



**P82-SUKRI**



**P83-JAMKUNDA**



**P85-BHAJIPANI**



**P86-EKLEHRA**

**Mine wise details of Mine Closure Plan as Approved by WCL Board in 244th meeting held on 28th January 2013**

Sl. No.	Name of Project	Total Project area as per EC (ha)	Rate in lakhs /ha	Current value of Corpus Fund in Rs. Lakhs	WPI Base Year (164.80)	Balance Life Yrs as on 1.4.12	Annual Corpus in Rs. Lakhs	Starting year	Total amt in Escrow A/c with 5% escalation on every year (Rs. In Lakhs)
27	Mohan(Maori) UG	800.00	1.00	1017.28	July12	9	113.03	12-13	1246.33
28	Ambara UG	775.510	1.00	986.14	July12	9	109.57	12-13	1208.18
29	Jharna UG	713.00	1.00	906.65	July12	2	453.32	12-13	929.30
30	Damua OC	65.45	6.00	499.35	July12	5	99.87	12-13	551.84
31	New Majri-III UG	1342.54	1.00	1707.18	July12	2	853.59	12-13	1749.86
32	Rajur UG	1695.60	1.00	2156.13	July12	28	77.00	12-13	4497.28
33	Kumbharkahni UG	442.00	1.00	562.05	July12	9	62.45	12-13	688.61
34	Durgapur OC	1186.54	6.00	9052.86	July12	9	1005.87	12-13	11091.33
35	HLC-I & III UG	748.97	1.00	952.39	July12	31	30.72	12-13	2173.94
36	Mahakali UG	404.98	1.00	514.97	July12	33	15.61	12-13	1249.42
37	DRC UG	779.29	1.00	990.95	July12	71	13.96	12-13	8638.77
38	Mana & Nandgaon UG	606.52	1.00	771.25	July12	17	45.37	12-13	1172.32
39	CRC UG	194.30	1.00	247.07	July12	2	123.54	12-13	253.26

## Chapter - 1

### INTRODUCTION

#### 1.1 About the Mine.

Mohan Colliery is a part of Kanhan area of Western Coalfields Limited, a Subsidiary of Coal India Limited. Presently, work of depillaring is going on in the No. 1 Seam in No. 9 & 10 Incline. The salient features of the Colliery are as under:

##### 1.1.1 Name of mine owner/company.

Project : Mohan Colliery  
Area : Kanhan  
Company : Western Coalfields Limited  
Mine Owner : Director (T) (P&P), WCL

##### 1.1.2 Address for Communication with PIN and Phone nos.

Project : Mohan Colliery  
Post Office : Ambara via Eklehra  
Tahsil : Parasia  
District : Chhindwara  
State : Madhya Pradesh  
PIN : 480449  
Telephone : (07160) 268785

##### 1.1.3 Location of mine.

Project : Mohan Colliery  
Area : Kanhan  
Coalfields : Pench-Kanhan Valley Coalfield  
Latitude : 22°09'38" to 22° 10'44"N  
Longitude : 78° 39'36" to 78° 41'13"E

##### 1.1.5 Date of start.

Date of start of development work : 1991  
Date of start of production : 1996

##### 1.1.6 Total project area of the mine as per EC:800.00 Ha.

### 1.1.7 Communication.

Mohan Colliery is situated nearly 4 Km from Palachourai Railway Station on Parasia to Sarni Road. It is connected by metalled road from Ambara Village.

### 1.1.8 Topography of the area.

The block occupies a central part of the east west elongated flat topped plateau. The highest elevation in the block is 900.06m above MSL recorded at borehole no. PM-6 in the north eastern corner of the block. A flat strip of land extends towards west, through this borehole and along the northern peripheral, upto western boundary. All along this strip a northerly located area of about 200m width has steep slope towards north, the lowest contour at extreme north being 810m. Especially north eastern corner, the topography exhibits cliffs also. This narrow part has been found dissected by a number of galleries, all of them having northerly course.

### 1.2 Reasons for Closure.

The reason for closure of mine is exhaustion of coal from approved PR limits.

### 1.3 Need of mine closure planning.

- 1.3.1 Mining activities leave long lasting impacts on the landscape, ecology and on local inhabitants. These activities disturb the delicate environmental and social equilibrium that exists in its area of influence. Hence it becomes imperative on part of the mine operator to restore the equilibrium in the mine affected area that existed in the pre-mining period. Thus, any mining venture must have adequate closure plan, aimed at rehabilitation of disturbed area which should be acceptable to local community as well as regulatory authority.
- 1.3.2 Mine closure encompasses rehabilitation process designed to restore physical, chemical and biological quality disturbed by the mining activities. Mine closure is not just something that happens at the end of a mines life rather mine closure is an ongoing series of decision and activities beginning in the pre-mining stage of mine and ending with a sustainable site that can be returned to the community.
- 1.3.3 Thus, a Mine closure plan needs to define the liabilities, responsibilities and authorities of the different agencies like the mine management, other regulatory bodies, Central and State Governments after mine closure. Various objectives of the advance mine closure planning are as follows:

- a. To allow productive and sustainable after-use of the site, which is acceptable to the mine owner and the regulatory authority.
- b. To protect public health and safety.
- c. To eliminate environmental damage and thereby encourage environmental sustainability.
- d. To minimize adverse socio-economic impacts of mining activities.
- e. To protect the flora and fauna of the area affected by the mining.
- f. Effective use of the assets created in course of mining.

1.3.4 Primarily, the mine closure activities are planned in two stages. The initial plan identifies and activities required to be executed as the mining activities progress after the inception of the project. These activities may undergo subtle changes depending upon the actual site condition during implementation. Finally, a detailed closure plan is to be prepared 4-5 years before the actual closure time of the mine depending upon the existing parameters at that point of time.

#### 1.4 Mine closure planning strategy in respect of Mohan UG Project based on existing set of parameters.

The life of the mine would be approximately 9 years from 1.04.2012, hence following activities are envisaged towards mine closure programme in respect of Mohan Colliery.

- a. Progressive mine closure activities will continue as envisaged in the approved Project report and as enumerated in the various approvals, permits, consents etc for which adequate financial provision is available.
- b. Although, it is very difficult to foresee the likely impacts due to closure of the mining activities at the time of exhaustion of reserves within the project area of the project but in the present report, the same has been broadly estimated and some mitigating measures have been suggested accordingly. These suggested measures along with certain other measures, as deemed fit, at the time of closure of mining activity in the project shall be taken up.

#### 1.5 Statutory Obligations.

The statutory obligation on part of the mine operator has been enumerated in various approvals, permits, consents etc. such as lease deed approved Mining Plan. Approval obtained from MOEF, Approval/ consent from State Pollution Control Board and the other relevant status Copies of the relevant approvals/clearances are enclosed.

All the applicable obligations are being strictly complied with and regular reports, wherever required is being sent to respective authorities

\*\*\*\*\*

## Chapter - 2

### MINE DESCRIPTION / MINING PARAMETERS

#### 2.0 Geology in brief

Area of Mohan Colliery is divided into two parts Dhau area and Sial Ghogri West Sub block lying in PENCH-KANHAN valley Coalfields. The entire area is covered by Deccan Trap formation. Along the southern periphery, lower Barakars are brought in juxtaposition with the Deccan Trap by an E-W trending and northerly heading major fault. Beyond the southern boundary Talchirs are exposed, having its normal contact with the Lower Barakars.

Current working is running in No. 1 Seam of Sial Ghogri West Sub Block (Maori Incline). This block is divided by no. of fault. Detail of faults are given in Table below-

Sl. No.	Name of Fault	Strike	Direction and amount of throw	Nature	Evidence
1	F42-F42	E-W	70m, Southerly	Oblique	It is proved in the adjoining Sial Ghogri block and also in Maori U/G. Working has been stopped against it.
2	F53-F53	E-W to SE-NW	20m-30m, southerly	Oblique	Difference in FRL in both sides of the fault.
3	F45-F45	NE-SW	30m-35m, northerly	Oblique	Difference in FRL in both sides of the fault.
4	F56-F56	E-W	5m, Southerly	Oblique	Difference in FRL in both sides of the fault.
5	F57-F57	E-W	5m, Southerly	Oblique	Difference in FRL in both sides of the fault.

**Detail of Coal Seams/Sections and Partings-**

Seam/Parting	Thickness Range (m)		Parting Range (m)		Remarks
	Minimum	Maximum	Minimum	Maximum	
IA	0.12 (PM-4)	1.61 (PM-4)			Being worked as a Composite section (IA+Parting+IB+Parting+IC+Parting)
Parting			0.08 (PM-21)	1.07 (PM-41)	
IB	0.43 (PM-45)	2.88 (SG-117)			
Parting			0.22 (PM-28)	1.78 (PM-36)	
IC	0.47 (PM-19)	2.58 (PM-24)			
Parting			4.19 (PM-17)	7.64 (PM-41)	
IIA	0.08 (PM-27)	1.30 (PM-9)			Unworkable
Parting			1.19 (PM-11)	5.59 (PM-42)	
IIB	0.13 (PM-14)	1.36 (PM-35)			Unworkable
Parting			0.82 (PM-29)	5.92 (PM-12)	
III	0.28 (PM-37)	2.09 (PM-6)			Workable in very small patch.
Parting			12.87 (PM-16)	25.49 (PM-13)	
IVA	0.05 (PM-8)	0.77 (PM-5)			Unworkable
Parting			0.53 (PM-3)	9.62 (PM-19)	
IVB	0.05 (PM-29)	1.96 (SG-26)			Workable in very small patch.
Parting			8.00	22.00	
V	One or two thin bands				Very impersistent

**2.1 Brief description of Mining System**

- 2.1.1 Presently work of depillaring with caving method is going on in Seam I and Seam III and Seam IV 'B' is virgin.  
The seam wise status is as under:

Seam	Dhou Block	Sial Ghogri west sub block
Seam I	Fully developed, depillared with Caving method.	1.Three depillaring Panel running between fault F42-F42 and F53-F53 with caving method loading by LHD into belt conveyor. ii) 2.50 Mt coal kept reserved beyond fault F53-F53 in main dip section for Continuous Miner.
Seam IIA	Fully developed, depillared with Caving method	Unworkable
Seam IIB	Fully developed, depillared with Caving method	Unworkable
Seam III	Fully developed, depillared with Caving method	Workable in very small patch.
Seam IVA	NA	Unworkable
Seam IVB	NA	Workable in very small patch.

## 2.2 Seam-wise Mine Details

Details about the seams which are virgin/being worked/have already been worked along with mine entry specifications, production figures and equipment type has been shown in the following tables:

**Table-1 (Detail of Sial Ghogri west sub block)**

Sl. No	Seam	Thickness (m)	Parting (m)	Depth (m)	Grade	Mineable Reserve (in Mt)	Balance Reserve (in Mt)	Balance Life
1	I	3.50-6.80	-	90-228	D	11.130	6.60	9Years
2	III	0.28-2.09	8.90-19.4	74-241	D	0.35	0.35	
3	IVB	0.05-1.96	13.4-36.0	106-263	B	0.85	0.85	
				Total		12.33	7.80	

\* In No. I seam balance reserve is 6.60 Mt, in which 4.20 Mt extracted by LHD and balance 2.40Mt kept reserve for Continuous Miner.

\*\* No. III seam is virgin and workable in small patch.

\*\*\* No. IV "B" Seam is also virgin which will be extracted by LHD.  
Dhou Block in all the seams is exhausted and mines are closed.

**Table-2 seams being worked presently**

S.No.	Seam	Method of Mining	Major equipments deployed (SDL) /LHD/ CM / Haulage/Conveyor/Pumps
1	Seam I	Semi mechanized (LHD+Belt conveyor) Depillaring with caving method	LHD/Conveyor & Pumps

**Table-3 Mine entry details**

Pit/Inc	Depth/length	Dia(m)/X-Sec.Sq.mt	Gradient	Purpose	Present status
Inc.9	590m	4.5x2.5	1 in 4.5	Belt/Intake	In operation
Inc.10	585m	4.5x2.5	Partly 1 in 4 & partly 1 in 4.5	Material/Man-riding System/intake	In operation
Return Air Shaft	10m	5.0m dia	Vertical	return	In operation. Main return Fan AF100 is installed
Drift From Airshaft to coal seam	420m	4.8x3.0	1 in 4.5	return	In operation

**Table – 4 Performance of mine for last 5 years**

		Year				
		2006-07	2007-8	2008-09	2009-10	2010-11
Production	Mt	0.481100	0.450000	0.450000	0.400900	0.329535
OMS	t	1.38	1.28	1.33	1.26	1.11
CPT	Rs/t	1047.12	1276.87	1434.18	1867.86	2380.75
SPT	Rs/t	1023.20	1053.79	1190.74	1237.13	1502.54
Profit/Loss	Rs/t	23.92	223.08	243.44	630.73	878.21
Total Profit/Loss	Rs Lakhs	115.07	1003.86	1095.48	2528.60	2894.00

**2.3****Mine boundary details**

North : Ambara Colliery  
 South : Incrop of No. 1 Seam  
 East : Sial Ghogri East sub block  
 West : Incrop of No. 1 Seam.

**2.4 Surface Water bodies and their status**

There is no prominent water body on the surface except few seasonal nallah.

**2.5 Maximum depth of the UG workings**

The maximum depth of UG workings is 228.00m in No. I Seam at Sial Ghogri west sub block.

**2.6 Coal processing / beneficiation operation**

There is Ground Bunker with capacity of (2 x 125t) = 250t for handling coal.

\*\*\*\*\*

## Chapter - 3

### CLOSURE PLAN AND RELATED ACTIVITES

It is very difficult to predict the various parameters which would be prevalent at the time of final mine closure (when the entire block reserve would get exhausted) and therefore a mine closure plan cannot be rigidly prepared at this point of time.

Nevertheless, the progressive mine closure activities will continue as envisaged in the approved project report and as enumerated in the various approvals, permits, consents etc.

Although, at this point of time, it is very difficult to foresee the likely impacts due to closure of the mining activities in the presently worked seams and other lower virgin seams, but the broad mine closure activities can be grouped under the following heads.

#### **3.1 Mined out Land & proposed final land use**

##### **3.1.1 Management of mined out area**

- a. The project is an underground mining project, where development as well as depillaring with caving is going on, but due to overlying thick trap no subsidence has been found in surface.
- b. As regards the underground void which will remain at the time of closure of the mine, they will get filled up gradually with water. The necessary precautions for the safety of the neighboring mine would be taken care of before closure of mine. Further, the water filled in UG voids will help in maintaining the water level in the nearby Area.

##### **3.1.2 Details of past subsidence and reclamation of subsided land**

As explained at Para 3.1.1(a) the depillaring has been done with caving method. The small part of surface land is tenancy and maximum is forest land. Mutual agreement has been done with land owners to pay compensation in case of any damages.

## 3.2 Water Regime management

### 3.2.1 Drainage pattern of the area (pre and post closure)

#### Existing drainage pattern

The area of the mine is undulating topography. The elevation from MSL varies from 848m to 813m. The Nallah N2 is the main drainage channel of the area which flows from East to west at a distance of about 0.5Km from south of the Incline mouth to 1Km west of the Incline mouth.

#### Post closure drainage pattern

After closure of mine the natural profile of the entire project area would not get disturbed. Therefore the general drainage pattern would not get disturbed. The natural drainage profile of the entire project area would be kept in a manner which will facilitate the normal run-off.

### 3.2.2 Mine water discharge details

#### Existing mine water discharge details

- a. Mine water is pumped in a water tank. Clean water coming out from the water tank is used for dust suppression and other industrial uses.
- b. Excess pumped out mine water is allowed to flow into the surface water bodies.
- c. Drains are provided around the coal stock to collect run-off for diverting into the natural water courses.

#### Post closure mine water discharge

Once the reserve is exhausted, the entries into the mine would be securely sealed for safety purposes. Hence, there will not be any discharge from the Mine. However, if for the safety of the future mine or any neighboring mine, pumping is required from the presently worked seams, then the arrangements for pumping will be kept intact and the water shall be discharged into the surface water bodies after passing the same through settling tank on the surface.

### 3.2.3 Water Quality Monitoring

#### Present Practice

Fortnightly samples of mine water as well as Quarterly samples of drinking water are collected and tested. Results of water testing pertaining to a particular Quarter are obtained and compared with MoEF standard.

**Present status of water quality**

Test results of the samples collected from the surface water bodies have shown that the water quality of surface water bodies is matching with the standards prescribed by MoEF.

Results of various quality checks have been furnished below in tabular format.

**DRINKING WATER QUALITY REPORT: NA****MINE WATER QUALITY****EFFLUENT WATER QUALITY MONITORING DATA**

NAME OF THE COMPANY : WCL YEAR : 2012  
 NAME OF THE AREA : KANHAN Q.E. : JUN.  
 NAME OF THE PROJECT : MOHAN / MAORI UG

**Name of the Location : Mine water discharge - KMUW-1**

Month	Date of Sample collection	Analysis Results			
		pH	TSS (mg/l)	COD (mg/l)	O & G (mg/l)
APR. 2012	04.04.12	5.83	98	140	BDL
APR. 2012	19.04.12	4.42	88	80	BDL
MAY. 2012	03.05.12	3.94	88	60	BDL
MAY. 2012	23.05.12	3.67	96	60	BDL
JUN. 2012	06.06.12	3.15	84	100	BDL
JUN. 2012	17.06.12	3.10	90	100	BDL
<b>TLV as per Env.(Protection) Amendment rule 2000</b>		<b>5.5 - 9.0</b>	<b>100</b>	<b>250</b>	<b>10</b>

(BDL - Below Detectable Level- Value < 1.0 mg/l)



**Well Water Level monitoring report****Groundwater monitoring data of dugwells in buffer zone of Mohan(Maori) UG mine,Kanhan Area**

Well No.	Name of village	Well location	Owner	Utility	Well dia (m)	Height of measuring point (m agl)	Well depth (m bmp)	WATER TABLE(m-bmp)				Formation Tapped
								May' 11	Aug' 11	Nov' 11	Jan' 12	
K												
37	GHUTTI	Near LP school	G.P.	Domestic	3.25	0.65	9.75	2.80	0.40	0.25	1.55	M/B sandstone
38	KEVLARI	About 100 m NE of G.P office openfield of Shobharam	SOBHARAM	Irrigation	6.10	0.55	9.80	7.78	1.50	2.55	6.65	M/B S.stone with Dyke
39	RICHHORA	Near Bajrang Mandir & Phulchand Mistra	G.P.	Domestic	5.00	0.60	11.10	7.25	2.65	2.95	3.20	M/B sandstone
40	SUKRICHOWKI	Back side of house of Saukar Near Parasia Junardev Road	SANKAR YADUBANSI	Domestic	1.60	GL	5.55	3.50	GL	GL	1.10	M/B sandstone
41	SUKRICHOWKI NALA	In the openfield Near Nala on Parasis-Jurdeo Road	SANKAR YADUBANSI	Irrigation	6.15	GL	11.00	5.30	2.45	3.70	8.80	M/B sandstone
42	CHIKALMAU	In the centre of village Near house HARICHANDRA DHURVE	G.P.	Domestic	3.15	0.80	9.50	7.75	2.40	2.60	3.30	M/B sandstone
47	MAURI	About 100 m East of Hingula Mandir near O/C patch Mauri	G.P.	Domestic	4.00	1.20	6.50	4.80	0.60	1.20	1.85	Barakar sandstone
48	MAYRI	Near Milk Dairy Depo. House of Roshan Vishkarma single house	Roshan Vishkarma	Irrigation	7.15	GL	7.45	6.75	1.90	2.55	4.25	Barakar sandstone

49	SILAD EHI	Outside village towards Umreth Road Back of house of Panchu Lal	Panchu Lal	Irrigation	6.90	G.L	11.50	8.90	2.35	4.05	7.70	Barakar sandstone
50	GAJANDO MINE (Field Area)	In the field of Jaipal power 100 m from road to mine	Jaipal Power	Irrigation	5.75	0.20	14.00	9.90	NA	3.65	5.75	Barakar sandstone
51	CHHABRI	On Umreth-Chindwara Road near Hut outside village	GP	Domestic	3.45	G.L	10.00	9.90	5.95	6.80	7.35	Metamorphics
52	SAKRADOL RAKID HANA	Side of Road well mark on Electric pole	Pvt	Irrigation	4.80	G.L	13.10	10.80	3.60	4.40	7.80	Metamorphics
53	CHOPAN TEKRI	Near Temple on side of Road & nala PWS well	PWS	Domestic	4.20	0.50	8.55	6.95	3.40	4.55	4.70	Metamorphics
54	SATPARAS	Outside village km/6 Umreth Near House of Budh Lal Bhai	Budhlal Bhai	Irrigation	4.90	G.L	9.10	8.95	3.00	3.90	6.70	Metamorphics
55	MENDKI	Out side village Back of house of Bargu Maskole	Bargu Maskole	Irrigation	7.00	G.L	14.70	13.45	10.85	11.75	12.40	Metamorphics
57	AMBARA	Side of Road to Parasia about 100 south in the field of Farukh Bhai	Farukh Bhai	Irrigation	8.20	0.70	11.50	10.80	5.10	6.65	8.55	Barakar sandstone
<b>Pench area</b>												
<b>P</b>	-											
1	LIKHAWARI ROAD	West of Parasia Pipariya Road near house of Dhanraj Yadav	Dhanraj Yadav	D	4.75	0.50	15.80	13.75	12.10	9.25	11.55	Motur
2	CHIKL KALAN	West of Pipariya Road at bank of Pench River	Govt.	D	6.00	0.75	10.50	Abdn	Abdn	ABDN	Abdn	Motur
4	DONGAR CHIKLI	West of Parasia pipariya Road in the low lying field opp.	Shyamal Durbe	D	4.00	0.85	7.60	3.30	0.83	1.30	1.95	Motur

		Bhimsen Majar											
5	KHIRS ADOH	On East of chindwara Parasia Road in the Bunflow of Mr Mehta	S.R. Mehta	D	2.25	0.60	13.05	6.70	0.30	0.55	4.20	Motur	
6	GAJANDO	On south of Mahadeo Puri-Gajando Road in open field of Ram Prasad Pawar	Ram Prasad pawar	Irrigation	4.25	0.30	12.90	10.75	6.80	7.15	9.05	Motur	
7	UMRATH	About 1 km from Umrath on Sila Devi Road in openfield of Narayan pawar	Narayan Pawar	Irrigation	5.60	G.L.	18.50	14.35	7.05	7.60	9.55	Basalt	
8	DIWADHAN A	West of Umrath Sukri Road in openfield of Premchand Yadav	Premchand Yadav	D	3.55	0.40	11.25	9.80	4.85	5.75	7.30	Metamorphics	
9	UPLI ROAD	West of Umrath-Sukri Road in the field of Raja cycle store	Atal Lal Bhoi	D	5.00	G.L.	10.95	Dry	6.00	6.40	7.35	Metamorphics	
10	SUKRI	Back side of Kherapati Mandir	Mandir Trust	D	4.00	0.45	16.45	3.65	0.15	0.60	1.00	Motur	
11	JAMGUNDA	On PWD Road to Sukri-Parasia opp. Talab	Govt.	D	2.75	1.25	18.45	17.00	11.80	12.15	13.25	Motur	
15	GANPATI U/G MINE	North of B.G. siding of Ganpati Mine WCL	WCL	D	4.00	0.55	5.90	2.35	0.55	0.90	1.10	Basalt	
26	BARKUHI	Back side of officess club Pench Area out side of club boundary	WCL	D	4.00	0.80	15.35	12.10	6.50	3.55	4.83	Motur	

Note: m.bmp-meter below measuring point,m agl-meter above ground level,m.bgl-meter below ground level , D-Domestic, I-Irrigation, GP-Gram Panchayat, DCB-Dug cum borewell,TW-Tube well

**Practice after the closure**

The above practice of monitoring of quality of water would be continued for a period 3 years after the cessation of mining activities. If required, corrective action/steps would be taken to mitigate any adverse effect on local water regime. The responsibility of maintaining the quality of drinking water will be entrusted on the State Authorities after 3 years of mine closure.

**3.3 Air quality management****3.3.1 Present practice**

a. At present air borne dust is suppressed by:

- \* Sprinkling water on the various roads of the mine where vehicles ply.
- \* Water sprinkling at the various points where coal is handled.
- \* Sufficient numbers of dust extractors have been provided in CHP.
- \* Proper loading of trucks to avoid any spillage of coal.
- \* Proper maintenance of I.C. engines.

b. Further, the quality of air is also monitored on regular basis by drawing samples from the various residential and non-residential areas of the project. The test results are compared with the standards prescribed by the MoEF & CPCB.

The test results of recent sampling are as under:

**AIR QUALITY MONITORING DATA**

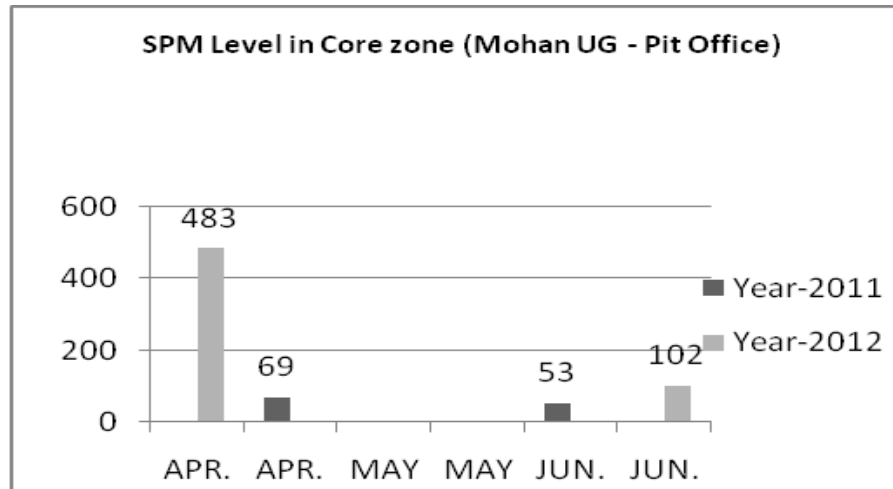
NAME OF THE COMPANY : WCL YEAR : 2012  
 NAME OF THE AREA : KANHAN Q.E. : JUN.  
 NAME OF THE PROJECT : MOHAN / MAORI UG

1. SAM Office - Ambara		: KMUA-1		( 24 hourly values in $\mu\text{g}/\text{m}^3$ )			
Month	Dates of Sampling		Parameters				
	From	To	SPM	PM-10	NO <sub>x</sub>	SO <sub>2</sub>	
APR. 2012	18.04.12	19.04.12	148	61	3	2	
JUN. 2012	16.06.12	17.06.12	95	44	2	1	
<b>TLV as per Env.(Protection) Amendment Rule 2000</b>			<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	

<b>2. Pit Office (Mohan)</b>		<b>: KMUA - 2</b>				
( 24 hourly values in $\mu\text{g}/\text{m}^3$ )						
Month	Dates of Sampling		Parameters			
	From	- To	SPM	RPM	NO <sub>x</sub>	SO <sub>2</sub>
APR. 2012	09.04.12	- 10.04.12	483	260	5	4
JUN. 2012	16.06.12	- 17.06.12	102	59	3	2
<b>TLV as per Env.(Protection) Amendment Rule 2000</b>			<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>

<b>3. Colony Health Center</b>		<b>: KMUA-3</b>				
( 24 hourly values in $\mu\text{g}/\text{m}^3$ )						
Month	Dates of Sampling		Parameters			
	From	- To	SPM	PM-10	NO <sub>x</sub>	SO <sub>2</sub>
APR. 2012	03.04.12	- 04.04.12	112	25	3	2
APR. 2012	18.04.12	- 19.04.12	123	66	3	3
MAY. 2012	03.05.12	- 04.05.12	146	41	2	2
MAY. 2012	24.05.12	- 25.05.12	194	95	4	3
JUN. 2012	11.06.12	- 12.06.12	67	29	2	1
<b>PERMISSIBLE LIMIT</b>			<b>200</b>	<b>100</b>	<b>80</b>	<b>80</b>

<b>4. Ambara Village</b>		<b>: KMUA-4</b>				
( 24 hourly values in $\mu\text{g}/\text{m}^3$ )						
Month	Dates of Sampling		Parameters			
	From	- To	SPM	PM-10	NO <sub>x</sub>	SO <sub>2</sub>
APR. 2012	03.04.12	- 04.04.12	121	49	3	2
APR. 2012	18.04.12	- 19.04.12	107	17	3	1
MAY. 2012	03.05.12	- 04.05.12	192	89	4	1
MAY. 2012	18.05.12	- 19.05.12	145	71	3	2
JUN. 2012	11.06.12	- 12.06.12	45	28	2	1
JUN. 2012	16.06.12	- 17.06.12	63	42	2	1
<b>PERMISSIBLE LIMIT</b>			<b>200</b>	<b>100</b>	<b>80</b>	<b>80</b>



### NOISE LEVEL DATA

NAME OF THE COMPANY : WCL YEAR : 2012  
 NAME OF THE AREA : KANHAN Q.E. : JUN.  
 NAME OF THE PROJECT : MOHAN / MAORI UG

**Name of the Location : Near Fan House - KMUN-1**

Month	Date of Data collection	Noise Level in dB(A)		Remarks
		Day Time	Night Time	
APR. 2012	08.04.12	72.9	65.3	
APR. 2012	19.04.12	68.8	62.5	
MAY. 2012	09.05.12	69.6	67.8	
MAY. 2012	22.05.12	69.9	68.1	
JUN. 2012	11.06.12	67.7	64.3	
JUN. 2012	22.06.12	70.3	66.2	
<b>Noise Level Standard as per Env. (Protection) Amendment rule 2000</b>		<b>75</b>	<b>70</b>	

**Name of the Location : Colony - KMUN-2**

Month	Date of Data collection	Noise Level in dB(A)		Remarks
		Day Time	Night Time	
APR. 2012	08.04.12	50.5	40.9	
APR. 2012	19.04.12	52.2	41.2	

MAY. 2012	09.05.12	51.9	41.6	
MAY. 2012	22.05.12	50.6	40.9	
JUN. 2012	11.06.12	52.4	42.9	
JUN. 2012	22.06.12	50.2	39.2	
<b>Permissible Limit</b>		<b>55</b>	<b>45</b>	

### 3.3.2 Practice after the closure of the mine

a. As the sources of dust and fume generation would no longer be present, the present practice of arresting the air pollution, as enumerated above at Para – 3.3.1 would no longer be required after the closure of the mine.

However, water sprinkling would be done on the roads, which remain in use after the mine closure.

b. Quality of air would be monitored for a period of 3 years after the cessation of mining activities. Efforts would be made to bring the air quality to the pre-mining standard.

### 3.4 Disposal of Buildings, Plants & Machineries

#### 3.4.1 Infrastructure details

Presently, the project has following infrastructure and it is most likely that these infrastructure will remain till the completion of the project.

#### a. CHP – Coal handling arrangement at surface with capacity of surface bunkers

CHP Bunker Capacity: 2 x 125t= 250 t

#### b. Workshop – Size with major equipment

Size : 30m x 20m  
 Equipments  
 Lathe : 02Nos.  
 Power drill : 02No.  
 Power saw machine : 01No.  
 Shaper machine : 01No

**c. Colony (number and type of quarters)**

Miners Quarters	: 93	B Types	: 27
Type-A	: 69	LCH	: 222
Old D Type	: 8		

**d. Water supply arrangement (source & facilities available like treatment plant and its capacity)**

Water for domestic use is taken from old existing quarry Amba OC of Ambara Colliery.

**e. Details of non-residential building – office building, sub-station, winder house, haulage room, boiler house, any other building**

Office Building	: 01
Substation	: 01
Fan house	: 01
Workshop	: 01
Explosive service Magazine	: 01

**3.4.2 Post closure disposal/re-use of the Buildings, Plants & Machineries****a. Disposal or reuse of existing CHP, Workshop, Haulage, Ventilation fan and railway siding for UG mines.**

At the time of closure of the mine, it is expected that most of the equipment would complete its rated life and would be surveyed off as per the Company's guidelines. The surveyed off equipments would be auctioned.

However, if some of the equipments would not have covered their rated life, they would be diverted to the neighboring projects for gainful utilization.

As regards CHP it would be linked to some other collieries, if the CHP is not found economical to be used, they will be dismantled and usable items would be dispatched to needy area/projects.

**b. Disposal or reuse of transmission lines and sub-station**

As per the electricity demand of the existing neighboring projects, an analysis would be made as to whether the existing sub-station and transmission lines could be gainfully used or not. If the scope of gainful utilization is not found, they will be dismantled and the usable items/spares/conductors etc. would be dispatched to needy Areas/projects.

### c. Disposal or reuse of residential and non-residential buildings

At the time of final closure, a list of surface buildings would be prepared in detail. Thereafter following steps would be taken in chronological order in respect of the available buildings.

- An assessment would be made to find that whether the available buildings can be used by the existing neighboring projects or any new project that might have come up in the vicinity.
- In case the listed assets cannot be utilized by the nearby project, efforts would be made to sale these assets after making the list available to potential purchasers and asking the interested purchasers to submit sealed bids.
- Thereafter the state agencies/local agencies may be asked to take possession of the buildings, if required by them.
- When there would be no takers, the buildings would be demolished and usable items would be recovered for future use. The clear land so obtained would be afforested or developed as park for the use of local people.

### 3.5 Safety and security arrangement

- 3.5.1 However, once the reserve is exhausted, the entries into the mine would be securely sealed for safety purposes.
- 3.5.2 In case the mine entries remain unused for some time, they would be properly fenced to avoid any inadvertent entry of animals or human beings. Flags/Boards with warning signals shall be posted at vulnerable places to avoid chances of accidents.

### 3.6 Survey records of workings

All the mine workings areas, roads, ponds, tanks etc. shall be resurveyed and records shall be updated. Copy of such records shall also be submitted to the appropriate competent authorities, such as DGMS and State Authorities.

### 3.7 Disposal management of hazardous material

At the time of closure, assessment would be made as to find whether there are any hazardous material that could cause problem. Such hazardous material e.g. explosives, chemicals, oil etc shall be appropriately disposed off.

### 3.8 Re-deployment of work force

The current manpower of the project is 1091 (as on 31.03.2012) and the likely superannuation numbers are as under:

Year	2012-13	2013-14	2014-15	2015-16
Manpower to be superannuated	85	107	86	103

- 3.8.2 At present it is very difficult to assess the manpower of the project, which will remain at the time of final closure of mining, as there would be cases of superannuation as well as induction of fresh manpower.
- 3.83 However, at the time of final closure after exhaustion of entire mineable reserve, following steps would be taken for effective management of available manpower at the time of closure.
- a. First option of VRS would be given to the age group of + 50 years some may accept, others will be gainfully utilized in other projects.
  - b. After exhausting the above option, the middle aged group workforce (between 40-50 years) would be transferred to the similar projects. If vacancy in similar nature projects gets exhausted, the relatively young workforce would be re-trained and re-deployed in other projects.
  - c. If vacancy in similar nature projects gets exhausted, the relatively young workforce would be re- trained and re-deployed in other projects .

### **3.9 Emancipation from the community facilities and the facilities to the PAPs**

- 3.91 The local communities are being provided many civic facilities, such as educational facilities, health facilities, and drinking water. At the time of final closure after exhaustion of entire mineable reserve, these facilities will be entrusted upon the local bodies/Trust of local people and state authorities so that same could continue even after the mine closure. If needed a lump sum amount would also be paid to the local bodies/Trust of local people/State bodies for proper upkeep and maintenance of various community facilities.
- 3.92 To ensure that no financial loss due to the closure of mining activity in the presently worked seam occurs to the local community engaged indirectly to the existing mine, following steps would be taken.
- It has been seen in the past that in the event of closure of a mine, the local people indirectly dependent on the mine switch over their economic/professional activities in the existing/new or expansion mines located in the nearby area. Local Management, if needed, extends some basic helps to them in such type of switching over. Hence, it is expected that in the instant case also the transition of the local people from one area to the other area for their sustenance would not be any problem.
  - It is proposed that afforested land will be handed over to State Forest Department for the benefit of local ecosystem. The forest wealth can also be utilized by local people or tribal in the form of fruits and fodders

**3.10 Plantation Details**

Sl.No.	Financial year	No. of Plants
1.	2010-11	NIL
2.	2009-10	NIL
3.	2008-09	NIL
4.	2007-08	NIL
5.	2006-07	NIL
6.	2005-06	NIL
7.	2004-05	NIL
8.	2003-04	25000
9.	2002-03	NIL
10.	2001-02	NIL

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**Chapter - 4****ECONOMIC REPURCUSSION OF CLOSURE OF MINE**

**4.1. Manpower of the project:** -The current manpower of the mine is 1091 as on 31.03.2012.

**4.2. Assessment of income scenario of local people: -**

- (a) Local employees will be redeployed in other projects of the company
- (b) People engaged in indirect employment / ancillary activities will find no financial loss due to the mine closure as their activities will be shifted in the new or expansion mines located in the coalfield area. As such the direct and indirect manpower will not be affected due to mine closure.
- (c) Resettlement / Redeployment of (a) & (b)
- Compensation for losing employment or income.
  - Vocational training for continuance / sustenance of income level :

Note: It is proposed that reclaimed and afforested land will be handed over to state Forest Dept for the benefit of local ecosystem as the surface rights are acquired from that dept. The forest wealth can also be utilized by local people or tribal in the form of fruits and fodders. The water reservoir in the mine voids will be utilized for irrigation, domestic drinking water or stabilizing the ground water regime. Landscaping during closure of mine will make the spot for tourist attraction.

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## **Chapter - 5**

### **TIME SCHEDULING FOR ABANDONMENT**

The closure of mines evolves environmental, technical, social aspect and financial assurance for implementing the post closure activities as per guideline of ministry of coal. The post closure implementing activities will run for three years. Mine closure in terms of sealing of mine openings, shifting of machineries will be carried out after one year. The table given below indicates major activities along with time frame is suggestive only. However actual time frame will be finalized at appropriate time well before actual closure of mine.

Sl.No.	Main Activities	Time Frame	HALF YEARS																							
			1				2				3				4				5				6			
1	Preparation of Survey and Disposal Report	1 month																								
2	Disposal of (P&M), including CHP, W/S and siding	2 and half years																								
3	Dismantling of Industrial structure	2 years																								
4	Clearing of Coal Stock and infrastructural Area	2 years																								
5	Disposal / Dismantling of Residential colony	2 and half years																								
6	Sealing of mine entries	2 years																								
7	Environmental Monitoring	Half year																								
8	Subsidence Management	3 years																								
9	Post closure subsidence monitoring	3 years																								
10	Any project specific activities																									
<p><b>NOTE:</b> - The progressive mine closure will be done as per the provisions made out in the project report and as per the situation/requirement that may arise in course of execution of the Project Report. The subsidence management of UG mine will be taken up whenever the cracks develop or the ground area subsides.</p>																										

## Chapter - 6

### MINE CLOSURE COST

- 6.1 The mine closure cost will cover the following activities for which a corpus fund will be created by opening an escrow account with the coal controller organization in nationalized bank. In case of mines having acid mine drainage, post closure acid mine drainage management cost shall also be included in the total closure cost. An amount @ Rs 1.00 lakhs per Ha of the project area will be deposited in this account for final mine closure. Progressive mine closure will be done with the fund provided of approved report.
- 6.2 The above rate has been taken from Circular No. 55011-01-2009-CPAM, Government of India, Ministry of Coal, Dated 27 August 2009 duly updated on 25 April 2012
- 6.3 Type of Mine : Under Ground mine      Life of mine(1.04.2012) 9 years  
Capacity of mine: 1.00 MTPA as per EC  
Total project area of the mine as per EC: 800.00 Ha.  
The financial provision for closure of Mohan Under ground mine comes to around Rs. 1246.33 lakhs (based on July 2012 WPI (Provisional)) at the @ Rs 1 lakh/ Ha.
- 6.4 Mine closure cost break-up for Mohan Under ground mine is hereunder;-

Sl. No	Activity	% of Total Mine Closure Cost	Amount (Rs Lakhs )
A	<b>Dismantling of structures</b>		
	Service Building	3.50%	43.62
	Residential Building	37.58%	468.37
	Industrial Structures like CHP, Workshop, Field Substation, Cap lamp room, Haulage, Fan Installation etc.	6.33%	78.89
B.	<b>Permanent sealing of mine entries (incline mouth and air shaft.)</b>		
	Sealing of incline mouths and air shafts.	2.32%	28.91
C.	<b>Subsidence Management.</b>	1.75%	21.81
D.	<b>Landscaping</b>		
	Landscaping of the clear land for improving its esthetic.	5.80%	72.29
E.	<b>Plantation</b>		
	Plantation over the cleared area obtained after dismantling and on other Barren Spaces.	10.00%	124.63
F.	<b>Monitoring / Testing of parameters for three years.</b>		
	Air Quality	3.83%	47.73
	Water Quality	3.34%	41.63
G.	<b>Entrepreneurship development (Vocational / Skill Development ) Training for sustainable income of affected people.</b>	4.65%	57.95
H.	<b>Miscellaneous and other mitigative measures.</b>	11.60%	144.57
I.	<b>Man power cost for supervision</b>	9.30%	115.91
<b>TOTAL</b>		100%	1246.33

**Note-** The above cost expenditure will be met from the corpus fund deposited in the escrow account by the mine operator. However, the additional amount beyond the funds in escrow account will be provided by the mine operator after estimating the final mine closure cost (as per the mine closure guideline).

#### 6.4 Details of escrow fund

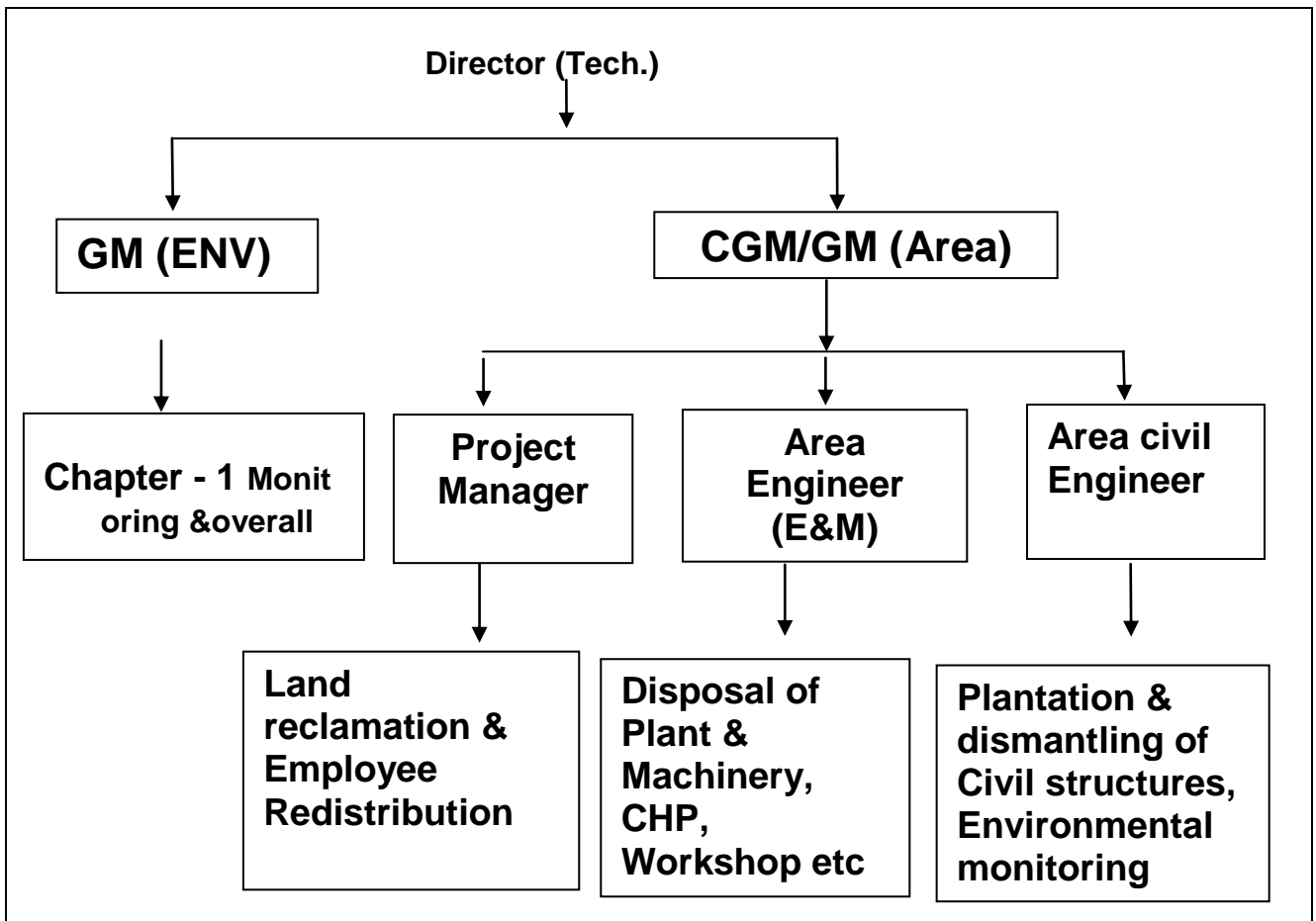
The total project area is 800.00 Ha. So the corpus based on August, 2009 rate is 800.00 Lakh @ 1.0 Lakh Rs/Ha of project Area. The wholesale price Index in August, 2009 is 129.6 and the latest WPI (Provisional), for the month of July 2012 available in the website of Office of Economic Adviser, Ministry of Commerce, Government of India is 164.8. So the current value of corpus is Rs. 800.00 \*164.8/129.6 Lakhs, which comes to Rs. 1017.28 lakhs. This corpus is to be divided by the life of mine i.e. 9 years. So dividing by 9 years, the annual corpus comes to Rs 113.03 lakhs. This amount is to be deposited in escrow account every year with 5% escalation.

S.NO.	FINANCIAL YEAR	AMOUNTS IN LAKHS
1	2012-13	113.03
2	2013-14	118.68
3	2014-15	124.62
4	2015-16	130.85
5	2016-17	137.39
6	2017-18	144.26
7	2018-19	151.47
8	2019-20	159.04
9	2020-21	167.00
	Total	1246.33

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## Chapter - 7 IMPLIMENTATION PROTOCOL

For implementing the mine closure activities, the following organizational structure has been proposed:



Environmental monitoring for three years after closure of mine will be carried out to evaluate the environmental quality of the area. If need be, proper mitigative measures will be taken up after evaluating the environmental quality. The funds for this have been provided in the cost estimate. Before closure of the mine, Area GM will prepare survey and disposal report and the same will be submitted to DGMS for acceptance.

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