

SMPL/ENV/Mine/EC/2024/2

Through E. Mail

Date: 27.11.2024

To,  
The Deputy Director General of Forest (DDGF),  
Ministry of Environment, Forest and Climate Change  
Integrated Regional Office, E-5 Kendriya Paryavaran Bhawan,  
E-5 Arera Colony, Link Road No.3, Ravishanker Nagar,  
**Bhopal-462016**  
Email: [tg035.ifs@nic.in](mailto:tg035.ifs@nic.in)

**Sub:** Submission of Six-Monthly EC (EC letter no. - J-11015/114/2015-IA. II (M) dated 18th Feb, 2022)  
Compliance Report for the period: **April-2024 to September-2024** of Limestone Mine with total excavation of  
14.11 million TPA [Limestone – 4.0 million TPA (ROM), Topsoil – 1.57 million TPA, OB – 6.51 million TPA,  
Mineral Rejects – 2.03 million TPA] along with the crusher of 1600 TPH in the mine lease area of 499.641 ha at  
Village – Kolkarhiya, Tehsil Pawai, Dist. Panna, MP by M/s Springway Mining Private Limited.

**Ref:** EC letter no. - J-11015/114/2015-IA. II (M) dated 18th Feb, 2022

Dear Sir,

With reference to the above subject matter and cited reference. We are herewith submitting the Half Yearly compliance  
of EC for the period **April 2024 to September 2024 and the same has been uploaded on MoEF&CC portal.**

As per MoEF & CC notification no. S.O. 5845 (E) 26.11.2018 the soft copy of same has been sent through email to  
[tg035.ifs@nic.in](mailto:tg035.ifs@nic.in), [moef@nic.in](mailto:moef@nic.in), [ccb.cpcb@nic.in](mailto:ccb.cpcb@nic.in), [cpcb.bhopal@gov.in](mailto:cpcb.bhopal@gov.in), [monitoring-ec@nic.in](mailto:monitoring-ec@nic.in), [chairman-mpppcb@mp.gov.in](mailto:chairman-mpppcb@mp.gov.in), [ms-mpppcb@mp.gov.in](mailto:ms-mpppcb@mp.gov.in), [rompppcb\\_sagar@rediffmail.com](mailto:rompppcb_sagar@rediffmail.com)

We hope you will find the same in order.

Thanking You,

Yours faithfully,

**For Springway Mining Pvt. Ltd.**  
**(A Unit of JSW Cement)**



**(Mayank Shrivastav)**  
**Authorized Signatory**

**Encl.: as above**

**Copy to:**

1. The Director (M), Ministry of Environment, Forest & Climate Change, Indira Paryavaran Bhawan, JOR Bagh Road, Aliganj, New Delhi-110003 Email: [moef@nic.in](mailto:moef@nic.in)
2. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-CUM office complex, East Arjun Nagar, New Delhi 110032. Email: [ccb.cpcb@nic.in](mailto:ccb.cpcb@nic.in)
3. The Regional Director, Central Pollution Control Board Paryavaran Parisar, E-5, Arera Colony, Bhopal-462016. Email: [cpcb.bhopal@gov.in](mailto:cpcb.bhopal@gov.in)
4. The Chairman, Madhya Pradesh State Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony, Bhopal-462016. Email: [chairman-mpppcb@mp.gov.in](mailto:chairman-mpppcb@mp.gov.in)
5. The Member Secretary, Madhya Pradesh State Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony, Bhopal-462016. Email: [ms-mpppcb@mp.gov.in](mailto:ms-mpppcb@mp.gov.in)
6. The Regional Officer, Regional Office, Madhya Pradesh State Pollution Control Board, Din Dayal Nagar, Housing Board Colony, Sagar (MP). Email: [rompppcb\\_sagar@rediffmail.com](mailto:rompppcb_sagar@rediffmail.com)

### Form for Uploading Six Monthly Compliance Report

#### Proposal Details

<b>Proposal No.</b>	<b>IA/MP/MIN/273 04/ 2015</b>	<b>Project Name</b>	Proposal for Environment Clearance of M/s Springway Mining Private Limited for Proposed Limestone Mine with total excavation of 14.11 million TPA [Limestone – 4.0 million TPA (ROM), Topsoil – 1.57 million TPA, OB – 6.51 million TPA, Mineral Rejects – 2.03 million TPA] along with the crusher of 1600 TPH in the mine lease area of 499.641 ha at Village – Kolkarhiya, Tehsil Pawai, Dist. Panna, MP.
<b>Category</b>	<b>A</b>	<b>MoEF File No.</b>	<b>J-11015/114/2015-IA. II (M) dated 18<sup>th</sup> Feb, 2022</b>
<b>Name of the Entity / Corporate Office*</b>	<b>M/s. Springway Mining Private Limited, Chennai, Tamil Nadu-600028</b>		
<b>Entity's PAN*</b>	<b>AAPCS9007H</b>		
<b>Entity Name as per PAN</b>	<b>SPRINGWAY MINING PRIVATE LIMITED</b>		

#### Compliance Letter/Report

<b>Reporting Year*</b>	<b>2024</b>	<b>Reporting Period*</b>	<b>April-2024 to September-2024</b>
<b>Remarks (if any)</b>	Submitting herewith the Six-Monthly EC Compliance Report for the period: April 2024 to September 2024 of Limestone Mine with total excavation of 14.11 million TPA [Limestone – 4.0 million TPA (ROM), Topsoil – 1.57 million TPA, OB – 6.51 million TPA, Mineral Rejects – 2.03 million TPA] along with the crusher of 1600 TPH in the mine lease area of 499.641 ha at Village – Kolkarhiya, Tehsil Pawai, Dist. Panna, MP by M/s Springway Mining Private Limited.		

#### Details of Production and Project Area

<b>Date of Commencement of Project /Activity: *</b>	<b>21/03/2022</b>	<b>Project Area as Per EC Granted (In Case of Mine Lease): *</b>	<b>499.641 ha.</b>
<b>Actual Project Area (In Case of Mine Lease): *</b>	<b>499.641 ha.</b>		

#### PRODUCTION CAPACITY

<b>Name of the Product*</b>	<b>Units*</b>	<b>As per EC granted*</b>	<b>Production during last financial year: (2023-24) *</b>
Limestone	Million TPA	4.0	0.001
Top Soil	Million TPA	1.57	0.00750304
OB	Million TPA	6.51	0.06599995
Mineral Reject	Million TPA	2.03	0.0
<b>Total Excavation Quantity</b>	<b>Million TPA</b>	<b>14.11</b>	<b>0.07450299</b>

Limestone Mine with total excavation of 14.11 million TPA [Limestone – 4.0 million TPA (ROM), Topsoil – 1.57 million TPA, OB – 6.51 million TPA, Mineral Rejects – 2.03 million TPA] along with the crusher of 1600 TPH in the mine lease area of 499.641 ha at Village – Kolkarhiya, Tehsil Pawai, Dist. Panna, MP by M/s Springway Mining Private Limited.

**EC Compliance Report: April-2024 to September-2024**

Environment Clearance of M/s Springway Mining Private Limited for Proposed Limestone Mine with total excavation of 14.11 million TPA [Limestone – 4.0 million TPA (ROM), Topsoil – 1.57 million TPA, OB – 6.51 million TPA, Mineral Rejects – 2.03 million TPA] along with the crusher of 1600 TPH in the mine lease area of 499.641 ha at Village – Kolkarhiya, Tehsil Pawai, Dist. Panna, MP.

**Environment Clearance vide No.: J-11015/114/2015-IA. II (M) dated 18<sup>th</sup> Feb, 2022**

**A. SPECIFIC CONDITION: -**

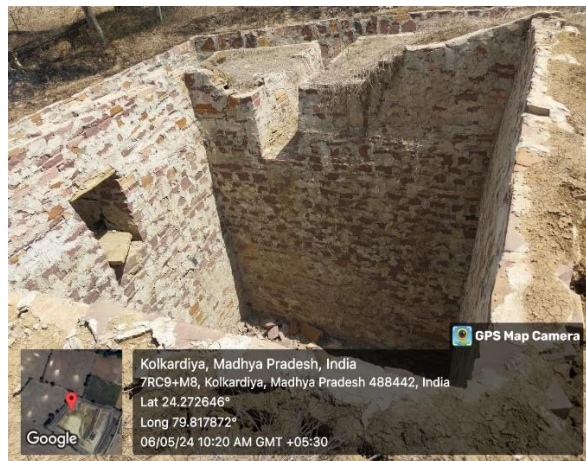
S. No.	Condition Type	Condition Details	Self Declaration	Remarks / Reason
i	Public Hearing	The budget of Rs 4.5 Crores to address the concerns raised by the public during the public hearing to be completed within 3 years from the date of start of mining operations.	Agreed to comply	The Mines commenced its operation on 21.03.2022 and is in development stage. Public hearing issues raised will be addressed as per submitted time bound action plan within 3 year from the date of start of mining operation. The status of Budget expenditure <b>(Rs. 1,17,23,962 /-) from FY 2023-24 to September 2024</b> is given below and please refer to <b>Annexure-1</b> for Photographs of the activities.

Sl. No.	Themes	Activities	No. of beneficiaries	Budget Spent
1	Health	Eye Camp at Kolkarhiya	103	52,100
2		General Health Camp at Kolkarhiya	155	24,745
3		Eye Camp at Devri	97	56,400
4		General Health Camp at Devri	144	23,925
5		Eye camp at Gaisabad	170	47,400
6		General Health Camp at Gaisabad	230	35,295
7		Eye Camp at Garreh	104	56,600
8		General Health Camp at Garreh	127	21,845
9		Supply of essential medical equipment at Devri & Gaisabad health Sub Centre	4000	185,956
10	Education	Distribution of Education Kits in Kolkarhiya, Devri, Raikra and Kuluwa, Gaisabad	800	552,871
11		Renovation of Gaisabad Anganwadi & Harijan Tola Primary School	130	767,000


	12		Supply of 425 School benches and 5 sets of office furniture in Govt. Schools in Kolkarhiya, Devri, Raikra & Gaisabad Villages	850	2,146,625
	13		Setting up Science laboratory-Physics, Chemistry & Bio in 1 Senior Secondary School (Gaisabad) : Furniture work & Lab equipment purchase	496	650,312
	14		Inaugural function for handover the laboratories' equipment and furniture set up works at Higher Secondary School, Gaisabad		6,008
	15		Digital Smart class installation at Higher Secondary School Gaisabad & Middle School Kolkarhiya	105	395,300
	16		Renovation of Middle School Kolkarhiya	197	13,73,856
	17		Renovation of Higher Secondary School Gaisabad	610	16,54,585
	18	Livelihood	Grant support in paying the electricity connection and transformer charges for establishing and running Dona/Pattal making machine unit run of Kalumar village of Jabera Janpad Panchayat, district Damoh.	30	261,441
	19	Women Empowerment	Support provided to Nai Duniya Newspaper towards Nayika Samman Programme.	55	118,000
	20		Celebration of International Women's day.	200	73,170
	21	Sports & Culture	Payment to Panna Collector-Towards celebration of Gaurav Diwas on the occasion of Chatsal Jayanti.	-	200,000
	22	Water	Borewell & 3 Hand Pump Installation (Kolkarahiya & Raikra Villages) & 1 Borewell and motorized system setup at Devri Village.	350	407,561
	23	Plant purchase, Plantation with tree guard installation	2500 Plantation and tree guard installation in Schools and Mine area		918,500
	24	Rural Infrastructure	Installation of 100 Street Solar lights at Village Kolkarhiya, Devri, Raikra and Kuluwa, Sanjay Nagar, Garreh, Gaisabad, Mahua Kheda, Bichua Chkka, Baleh & Adanwara Villages	6000	1,684,467
	<b>Total</b>			<b>14,953</b>	<b>11,723,962</b>
ii	Statutory compliance	The Project Proponent shall implement the Rehabilitation of project affected families (PAFs) and payment of compensation to PAFs as per the policy and guidelines of the central/state Government, as provided under the law.	Complied	Noted, Till date we have purchased 170.75 ha (Govt land 1.75 ha and Private 169.0 ha) and Rehabilitation of project-affected families (PAFs) and payment of compensation to PAFs is being done as per the policy and guidelines of the central/state Government, as provided under the law.	
iii	Statutory compliance	The Project Proponent must ensure that the Garland drains created to protect entry of water from river into	Complied	Excavation of pit has been commenced in approved area for first year period which is lying over ground level 318 m RL. A closed garland drain with suitable bund has been constructed	



		the mine and from the mine to river to be dealt with the proper protection measures proposed and should be designed and constructed in such a way that at no time solids and pollutants from the mine area from all the pits will not flow into the river and it should be ensured that the water in the drain as surface runoff from mine collected in the pit be monitored for quality and treated accordingly.		all along the proposed area of excavation.  Photographs of protected Garland drain and siltation pond with wire fencing along pit area and bund under development along proposed excavation area is enclosed as <b>annexure-2</b> .
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iv	Mining Plan	The Committee noted that the PP presented that initially Pit-A will be operated for a period of 10 years and hence the protection measures proposed should be demonstrated in Pit –A first. Based on the performance of adopted measures the design and the construction shall be taken up in further pits.	Complied	Excavation of pit A has been commenced in approved area for pit of first year period, which is lying over ground level 318 m RL. A closed garland drain with suitable bund has been constructed all along the proposed area of excavation and will be ensured for all respective pits in future also. Please refer <b>annexure-2</b> for photographs.
v	Water quality monitoring and preservation	Since the major river is garlanding the entire mine area on northern, western and southern side, all the protection measures shall be taken up so that neither the river hydrology nor the quality of the river will have any impact till the entire mining operation.	Being complied	A garland drain with suitable bund has been constructed all along the proposed area of excavation and will be ensured for all respective pits in future also to avoid any impact till the entire mining operation. Please refer <b>annexure-2</b> for photographs.

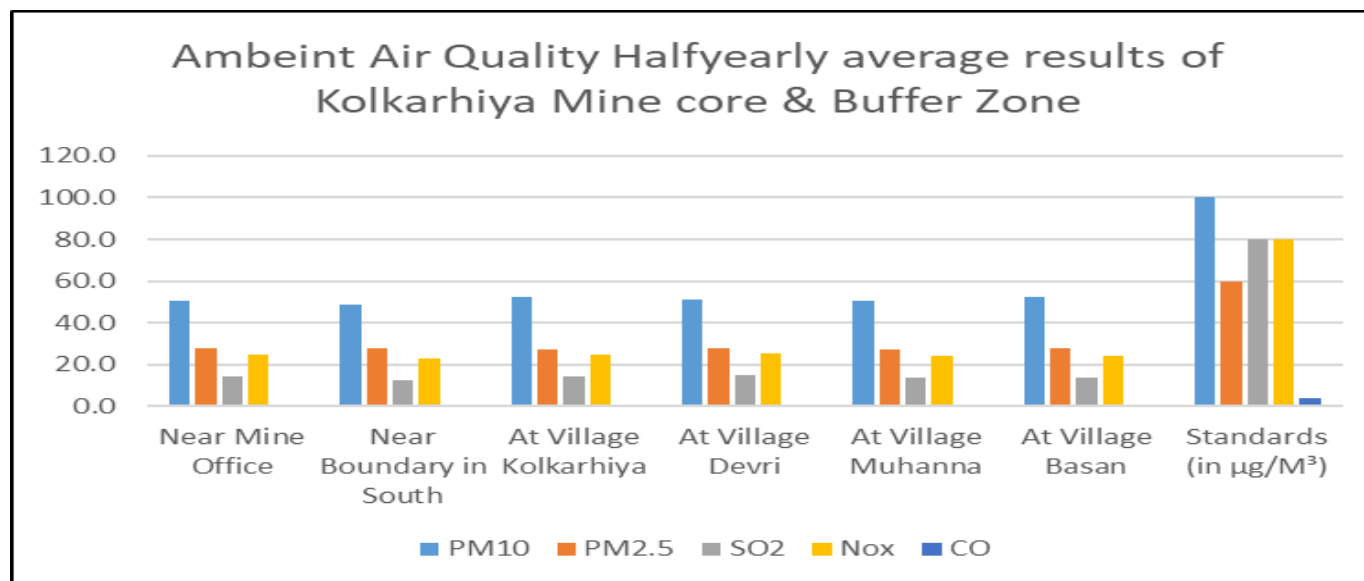
vi	Mining Plan	The Sub- Committee of the EAC (Non-Coal Sector) shall visit the mine after the mine commences operation to assess the performance of the above measures mentioned in condition no. iii, iv & v.	Being Complied	Noted. Mining operation has been commenced on 21.03.2022, mine is in development stage and limestone is being produced from float limestone lumps found on ground surface only. Please refer <b>annexure-2</b> for photographs of protection measures.
vii	Miscellaneous	PP shall stay in touch with Forest and Wildlife Department for any intervention required in future for protecting the wildlife.	Complied	Noted. Guidance will be taken from Forest and Wildlife department if there is any requirement in near future for protecting the wildlife.
viii	Land Reclamation	The topsoil shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation.	Complied	Noted. Top soil will only be stored at earmarked site(s) and the soil will be used for plantation and land reclamation. Photographs of plantation developed on top soil is enclosed as <b>Annexure-3</b> .
				
ix	Human Health Environment	Regular surveillance on The topsoil shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation. Silicosis shall be carried through regular occupational health checkup of 1/3 of the persons every year.	Being Complied	Noted. <ul style="list-style-type: none"> <li>Top soil will only be stored at earmarked site(s) and the soil will be used for plantation and land reclamation.</li> <li>Pre-employment medical checkup is being carried out. Please refer <b>annexure-4</b> for medical checkup reports.</li> </ul>
x	Statutory compliance	The project proponent shall obtain the NOC from CGWA for intersection of ground water table.	Complied	NOC for intersection of ground water table has been obtained from CGWA vide letter no. CGWA/NOC/MIN/ORIG/2021/13119 dated 10.04.2024. Copy of the same is already submitted through EC compliance report dated 22.05.2024.
<b>STANDARDS CONDITIONS:</b>				
I.	<b>Statutory Compliance</b>			

1)	Statutory compliance	This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High NGT and any other Court of Law, Common Cause Conditions as may be applicable.	Complied	Noted and all applicable laws will be followed.
2)	Statutory compliance	The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August,2017 in write Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors before commencing the mining operations.	Complied	Noted and all applicable laws will be followed.
3)	Statutory compliance	The State Government concerned shall ensure that mining operation not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2nd August,2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors.	Complied	Not applicable, no any compensation levied is due and unit is complying with the Judgment of Hon'ble Supreme Court dated 2nd August, 2017.
4)	Statutory compliance	The Project Proponent shall follow the mitigation measures provided in MoEFCC's Office Memorandum No. Z11013/57/2014-IA.II (M), dated 29th October, 2014 titled "Impact of mining activities on Habitation –Issues related to the mining Projects wherein Habitations and villages are the parts of mine lease areas or Habitations and villages are surrounded by the mine lease area".	Complied	<p>Unit has taken the following measures to reduces the impact of mining activities on habitations: -</p> <ul style="list-style-type: none"> <li>• Garland drain constructed,</li> <li>• Siltation pond facilitated,</li> <li>• Regular water spray on haul road is being done,</li> <li>• Company owned road used for limestone transportation, and</li> <li>• Carried out dense plantation.</li> </ul> <p>Following measures will also be implemented in near future as Mining operation has been commenced on 21.03.2022, mine is in development stage and limestone is being produced from float limestone lumps found on ground surface only.</p> <ul style="list-style-type: none"> <li>• Rainwater collected in mine pit will be supplied to nearby villagers during the lean period.</li> <li>• After installation of the Hi mast tower light, it will be kept in off</li> </ul>

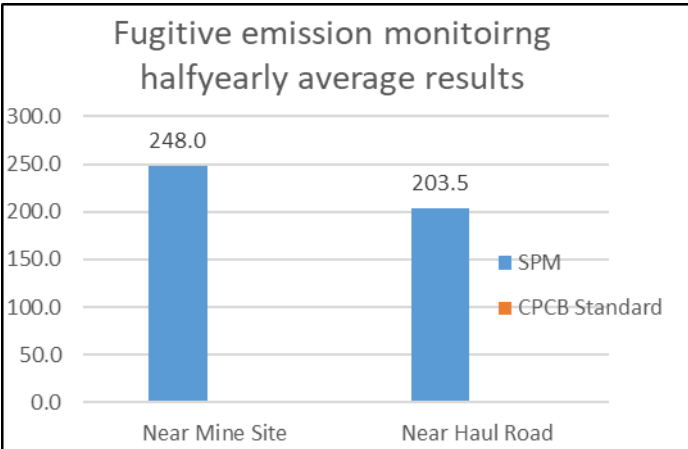
				<p>mode during night period,</p> <ul style="list-style-type: none"> <li>• Control blasting will be implemented after getting the permission of Blasting.</li> <li>• No village road will be used for the transportation of minerals.</li> </ul>
5	Statutory compliance	A copy of EC letter will be marked to concerned panchayat/ local NGO etc. if any, from whom suggestion/ representation has been received while processing the proposal.	Complied	Copy of EC letter has been marked to Gram Panchayat Kolkarhiya, dated 22/02/2022. Copy of the same is already submitted through EC compliance report dated <b>20.05.2023</b> .
6	Statutory compliance	State Pollution Control Board/ Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.	Complied	Noted. This condition will be complied by SPCB
7	Statutory compliance	The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance latter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/ Committee and web site of the Ministry of Environment, Forest and Climate Chang ( <a href="http://www.parivesh.nic.in">www.parivesh.nic.in</a> ). A copy of the advertisement may be forwarded to the concerned MoEFCC Regional Office for compliance and record.	Complied	M/s Springway Mining Pvt Limited has widely advertised about the grant of this EC letter by printing the same in at least two local newspapers, and in vernacular language of the concerned area. i.e.: Dainik Bhasker and Raj Express. Copy of the Newspaper cutting is already submitted through EC compliance report dated <b>20.05.2023</b> .
8	Statutory compliance	The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred. PP needs to apply for transfer of EC as per provisions of the	Complied	Noted, If any change in ownership of mining, will be intimated to the ministry.

		para 11 EIA Notification, 2006 as amended from time to time.																																																																	
II. Air Quality Monitoring and Preservation																																																																			
9)	Air Quality Monitoring and Preservation	The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Station with 1 (One in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM10, PM2.5, NO2, CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/I, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the mine Gate of the mine site.	Agreed to Comply	<ul style="list-style-type: none"><li>• The Mines EC is granted on 18.02.2022 and Mining operation has been commenced on 21.03.2022, mine is in development stage.</li><li>• Ambient air quality monitoring in core (Mine Site and Mine Boundary) and buffer zone (Village Kolkarhiya, Basan, Muhana, Rekra, Devri) is being carried out by MoEFCC approved laboratory. Six monthly average reports are enclosed as <b>Annexure-5</b>.</li></ul> <p>We are in the process of finalizing the technical quotation for the installation of the CAAQMS system along with the digital display board as per applicable guidelines and will be installed as early as possible.</p> <table><tr><th colspan="7">Ambient Air Quality Six monthly average results of Kolkarhiya Mine core &amp; Buffer Zone</th></tr><tr><th>Sr. No.</th><th>Name of Location/Parameter</th><th>PM10</th><th>PM2.5</th><th>SO2</th><th>NOx</th><th>CO</th></tr><tr><td>1</td><td>Near Mine Office</td><td>50.8</td><td>27.8</td><td>14.0</td><td>24.6</td><td>0.6</td></tr><tr><td>2</td><td>Near Boundary in South</td><td>48.8</td><td>27.6</td><td>12.7</td><td>22.8</td><td>0.5</td></tr><tr><td>3</td><td>At Village Kolkarhiya</td><td>52.1</td><td>27.4</td><td>14.2</td><td>24.6</td><td>0.6</td></tr><tr><td>4</td><td>At Village Devri</td><td>51.3</td><td>27.7</td><td>14.7</td><td>25.6</td><td>0.6</td></tr><tr><td>5</td><td>At Village Muhanna</td><td>50.4</td><td>27.1</td><td>13.8</td><td>24.1</td><td>0.6</td></tr><tr><td>6</td><td>At Village Basan</td><td>52.2</td><td>27.8</td><td>13.7</td><td>24.2</td><td>0.6</td></tr><tr><td>7</td><td>Standards (in µg/M³)</td><td>100</td><td>60</td><td>80</td><td>80</td><td>4</td></tr></table>	Ambient Air Quality Six monthly average results of Kolkarhiya Mine core & Buffer Zone							Sr. No.	Name of Location/Parameter	PM10	PM2.5	SO2	NOx	CO	1	Near Mine Office	50.8	27.8	14.0	24.6	0.6	2	Near Boundary in South	48.8	27.6	12.7	22.8	0.5	3	At Village Kolkarhiya	52.1	27.4	14.2	24.6	0.6	4	At Village Devri	51.3	27.7	14.7	25.6	0.6	5	At Village Muhanna	50.4	27.1	13.8	24.1	0.6	6	At Village Basan	52.2	27.8	13.7	24.2	0.6	7	Standards (in µg/M³)	100	60	80	80	4
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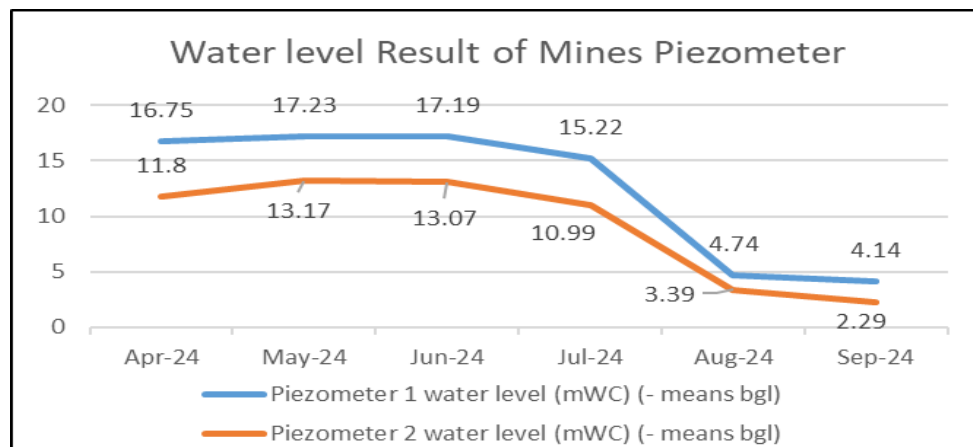


10)		<p>Effective safeguard measure for prevention of dust generation and subsequent suppression (Like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipment's/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dusty control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEFCC/Central Pollution Control</p>	<p>Complied</p>	<p>Following safeguard measures taken for prevention of dust generation: -</p> <ul style="list-style-type: none"> <li>• Regular water sprinkling is being done on haul roads and loading and unloading point to control the fugitive emission.</li> <li>• Ambient air quality monitoring is being carried out on regular basis by NABL accredited laboratory and air pollution level are well within the prescribed norms.</li> <li>• Six monthly average Ambient air quality and fugitive emission monitoring reports for the period: October-23 to March-24 are enclosed as <b><u>Annexure-6</u></b>.</li> </ul> <p>In Addition to the above, following measures will also be implemented in near future as Mining operation has only been commenced on 21.03.2022, mine is in development stage and limestone is being produced from float limestone lumps found on ground surface only.</p> <ul style="list-style-type: none"> <li>• Water sprinkling system will be provided at the dump hopper to control the fugitive emission.</li> <li>• Crusher has yet not been installed and upon installation, air pollution control equipment's like bag filters, dry fogging system will be installed at crusher to avoid generation of dust @ the source &amp; during transportation.</li> </ul>
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		Board.		<table><tr><th colspan="3">Fugitive emission monitoring average results of Kolkarhiya Mine</th></tr><tr><th>Sr. No.</th><th>Name of Location/Parameter</th><th>SPM</th></tr><tr><td>1</td><td>Near Mine Site</td><td>248.0</td></tr><tr><td>2</td><td>Near Haul Road</td><td>203.5</td></tr></table> <div><p>Fugitive emission monitoring halfyearly average results</p><p>Standard : 5000 µg/m3</p></div>	Fugitive emission monitoring average results of Kolkarhiya Mine			Sr. No.	Name of Location/Parameter	SPM	1	Near Mine Site	248.0	2	Near Haul Road	203.5
Fugitive emission monitoring average results of Kolkarhiya Mine																
Sr. No.	Name of Location/Parameter	SPM														
1	Near Mine Site	248.0														
2	Near Haul Road	203.5														
III.	Water Quality Monitoring and Preservation															
11)	Water Quality Monitoring and Preservation	In case, the immediate mining scheme envisages intersection of ground water table, then Environment Clearance shall become operation only after receiving formal clearance from CGWA, In case, mining operation involves intersection of ground water table at a later stage, than PP shall ensure that prior approval from CGWA and MoEFCC is in Place Before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed	Complied	NOC for the intersection of ground water table has been obtained from CGWA vide letter no. CGWA/NOC/MIN/ORIG/2021/13119 dated 10.04.2024. Copy of the same is already submitted through EC compliance report dated 22.05.2024.												

		hydro-geological study of the area.		
12)	Water Quality Monitoring and Preservation	Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six- monthly basis to the Regional Office of the Ministry, CGWA and State Ground water Department / State Pollution Control Board.	Complied	<p>Regular monitoring of groundwater level and quality is being carried out in and around the mining lease area as per the Environment Management Plan of approved Mining plan by establishing a network of existing wells in nearby 10 Villages.</p> <p>The unit has installed 1 no. of piezometers as per CGWA NOC for periodic monitoring of groundwater level and installed 1 DWLR (Digital Water Level Recorder) with telemetry system for online monitoring of groundwater level.</p> <p>Detailed ground water level monitoring and quality report for the period: April-24 to Sept-24 is enclosed as <b>Annexure-7 &amp; 8</b>.</p>

Month	WATER LEVEL (mWC) (- means bgl)	
	Piezometer-1 (with telemetry)	Piezometer-2 (without telemetry)
Apr-24	16.75	11.8
May-24	17.23	13.17
Jun-24	17.19	13.07
Jul-24	15.22	10.99
Aug-24	4.74	3.39
Sep-24	4.14	2.29

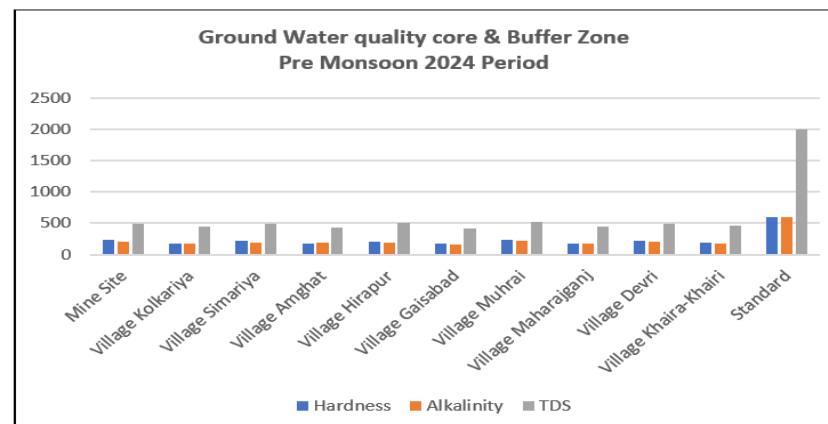
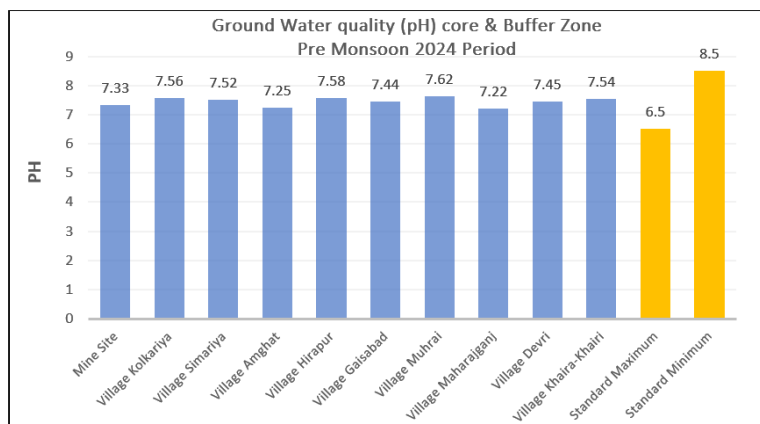


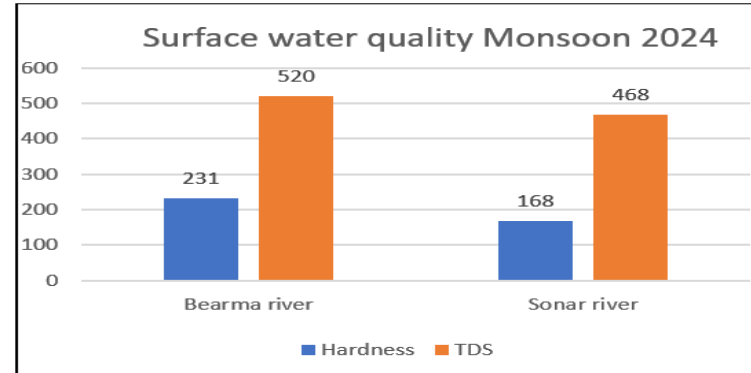
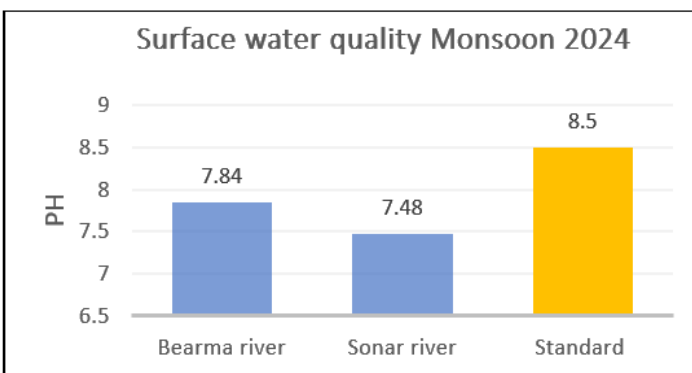
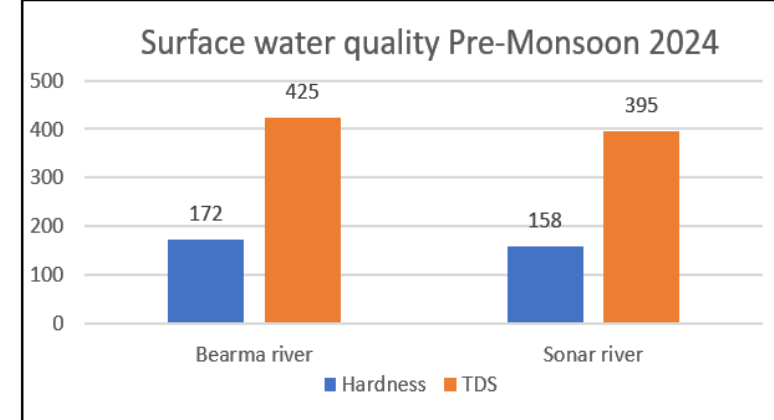
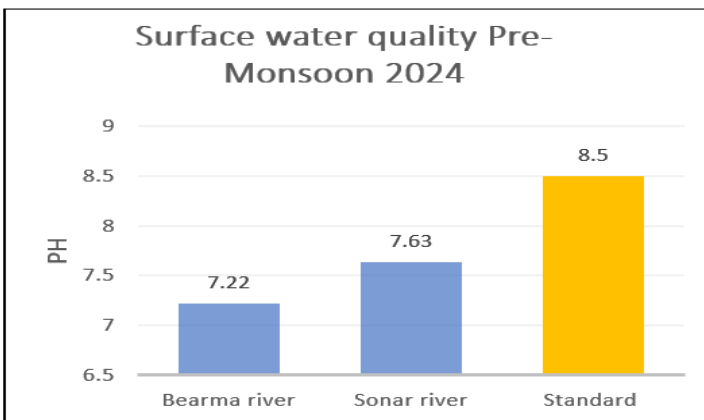
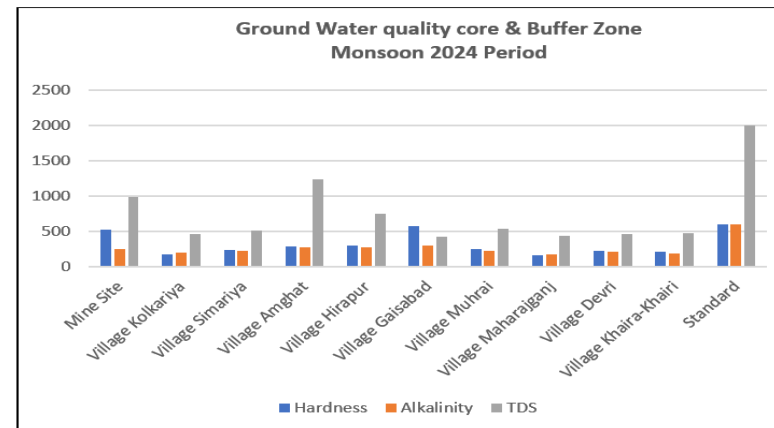
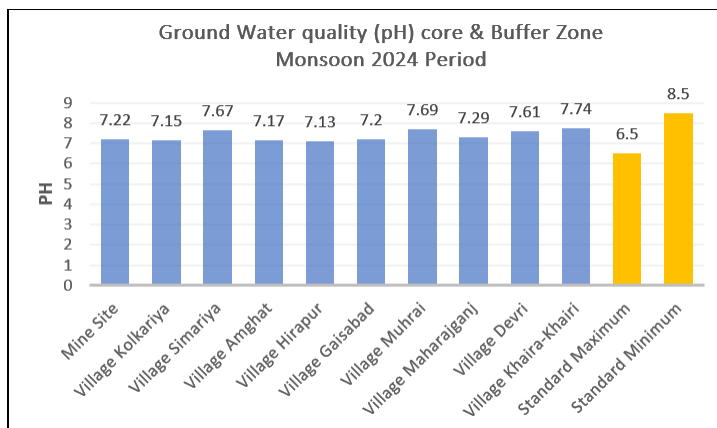
13)	Water Quality Monitoring and Preservation	The Project Proponent shall undertake regular monitoring of natural water course/water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease including upstream and downstream. Sufficient number of gullies shall be provided at	Complied	<ul style="list-style-type: none"> <li>Unit is monitoring the ground water and surface water quality including both River &amp; seasonal Nallah on quarterly basis i.e.: Pre-monsoon (April-May), Monsoon (August), Post-monsoon (November) and Winter (January) and upstream and downstream flow rate of surface water on monthly basis with the help of MoEF&amp;CC approved Laboratory.</li> <li>Please refer the <b>Annexure-8</b> for analysis report for the period: Pre- monsoon and Monsoon season.</li> </ul>
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appropriate places within the lease for management of water. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/or alteration be made to water bodies during mining operations without justification and prior approval of MoEFCC. The monitoring of water courses/Bodies existing in lease area shall be carried out four times in a year viz. pre – monsoon (April May), monsoon (August), post –monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional office, Central Ground water Authority and Regional Director, Central Ground water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six- monthly basis.

- There is/will be no any obstruction and/or alteration be made to water bodies during mining operations without justification and prior approval of MoEFCC.
- All reports are being submitted regularly to the Ministry of Environment, Forest and Climate Change and its Regional office, Central Ground water Authority and Regional Director, Central Ground water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six- monthly basis.
- Six monthly result trends analysis of Ground water is as given below:
  - ❖ The groundwater analysis demonstrates stable pH levels, ranging from 7.22–7.62 in the pre-monsoon and 7.13–7.74 during the monsoon, indicating a consistently neutral to slightly alkaline environment suitable for various uses. Total hardness, alkalinity, and total dissolved solids (TDS) increase during the monsoon, highlighting the potential for enhanced mineral availability due to natural recharge. The variation in these parameters reflects a dynamic yet balanced water quality, adaptable for both pre-monsoon and monsoon conditions, supporting agricultural and domestic needs.





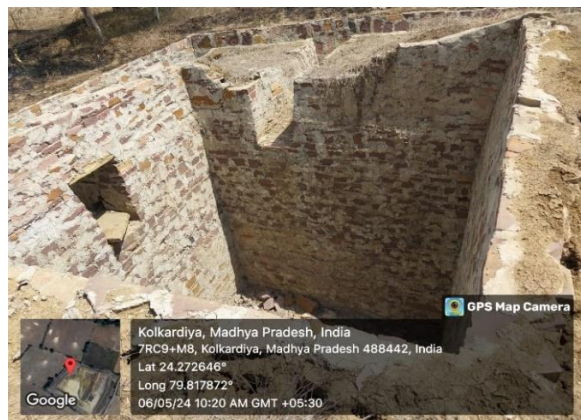
14)	Water Quality Monitoring and Preservation	Quality of polluted water generated from mining operation which include Chemical Oxygen Demand (COD) in mine run-off: acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TSS), Dissolved Oxygen (DO), pH and Total Suspended solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the mine gate of the Company. The circular No. J-20018/1/2006-IA. II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.	Agreed to Comply	<ul style="list-style-type: none"> <li>• The Kolkarhiya Limestone Mine has been commenced on 21.03.2022 and is in development stage.</li> <li>• There is no wastewater generation from the Limestone mining operation as it is in developmental stage.</li> </ul>
15)	Water Quality Monitoring and Preservation	Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/ State Ground water Department. A report on amount of water recharged needs to be submitted to Regional Office MoEFCC annually.	Complied	<ul style="list-style-type: none"> <li>• Siltation pond and Garland drain has been constructed to augment water table.</li> <li>• Rainwater is collected in the lower most benches to augment Ground water resources.</li> </ul> <p>Photos of implemented rainwater harvesting measures i.e.: Mine pit, Garland drain and Siltation pond etc. are enclosed as <b><u>Annexure-9</u></b>.</p>



Rainwater Harvesting in Mine Pit



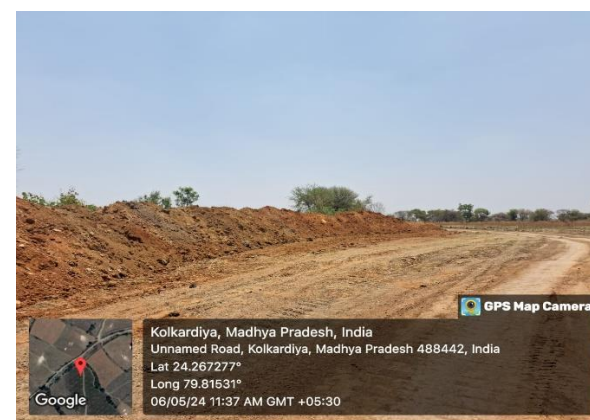
Garland Drain



Siltation Pit-1



Siltation Pit-2

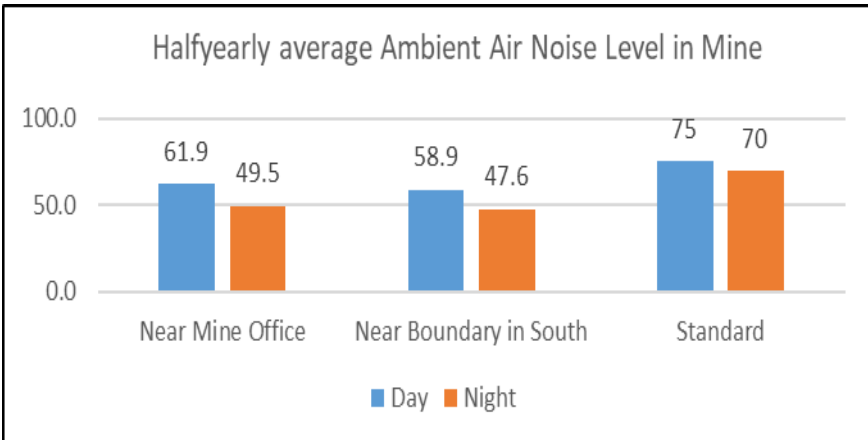
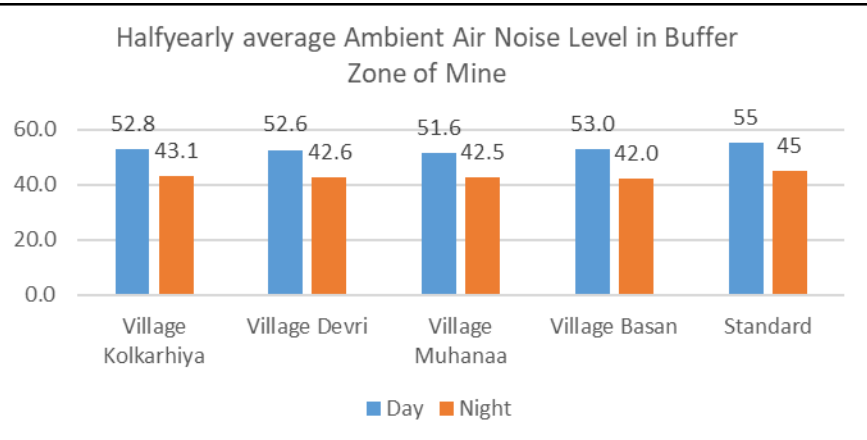
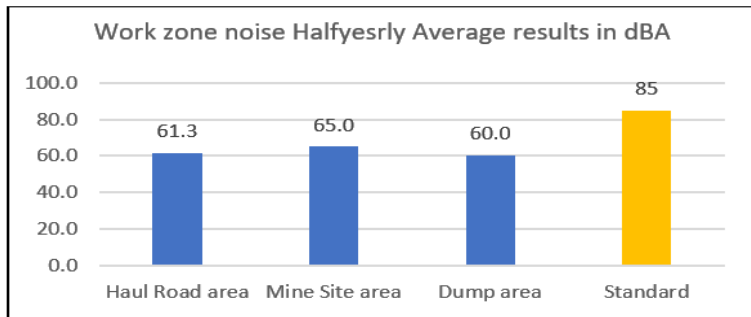


Bund along-with Mine Pit

16)	Water Quality Monitoring and Preservation	Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent	Complied	<ul style="list-style-type: none"> <li>• There is no industrial waste water generation from the Mine operation.</li> <li>• Workshop is yet to be installed. Workshop waste water will be passed through oil and grease trap and clear water will be reused for dust suppression. Separated Oil &amp; grease from waste water will be sold to recycler authorized from CPCB/SPCB.</li> <li>• Quality of water will be analyzed by NABL accredited Lab to confirm the standards prescribed by SPCB.</li> </ul>
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		shall be treated after its initial Passage through oil and grease trap.		
17)	Water Quality Monitoring and Preservation	The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution Control Board/Committee.	Agreed to comply	The Kolkarhiya Limestone Mine has been commenced w.e.f. 21.03.2022 and is in development stage. However, water audit will be conducted.
<b>IV. Noise and Vibration Monitoring and Preservation</b>				
18)	Noise and Vibration Monitoring and Preservation	The peak particle velocity at 500m distance or with the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.	Complied	<p>The Kolkarhiya Limestone Mine has been commenced on 21.03.2022 and is in development stage and limestone is being produced from float limestone lumps found on ground surface only.</p> <p>Blasting and magazine permission is obtained on 28.08.2023. PPV is being monitored periodically, First blasting was done on 17<sup>th</sup> May 2024 and PPV was 0.418 mm/sec. Following measures is being implemented.</p> <ul style="list-style-type: none"> <li>• Blasting operation is being carried out in day time only.</li> <li>• Sequential blasting machine (SBM), Delay detonator, Non-Electric detonator for blasting is being used to mitigate vibration.</li> <li>• Water injection system on DTH drill will be provided which suppresses dust at its source of generation.</li> <li>• Blasting report is enclosed as <b><u>Annexure-10</u></b></li> </ul>
19)	Noise and Vibration Monitoring and Preservation	The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages location close to mining operation. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed: by orienting the	Complied	<ul style="list-style-type: none"> <li>• Unit is maintaining the illumination and noise level well within permissible limits during day and night hours.</li> <li>• Six monthly noise level monitoring report of ambient &amp; work zone area for the period: April-24 to Sept-24 are enclosed as <b><u>Annexure-11</u></b>. Please refer below graph showing 1<sup>st</sup> &amp; 2<sup>nd</sup> Quarter average Noise level results in Core zone as well as Buffer zone of Mine area.</li> </ul>



		floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day/night hours.																																
<div><div><div>Halfyearly average Ambient Air Noise Level in Mine</div><table><thead><tr><th>Location</th><th>Day</th><th>Night</th></tr></thead><tbody><tr><td>Near Mine Office</td><td>61.9</td><td>49.5</td></tr><tr><td>Near Boundary in South</td><td>58.9</td><td>47.6</td></tr><tr><td>Standard</td><td>75</td><td>70</td></tr></tbody></table></div><div><div>Halfyearly average Ambient Air Noise Level in Buffer Zone of Mine</div><table><thead><tr><th>Location</th><th>Day</th><th>Night</th></tr></thead><tbody><tr><td>Village Kolkarhiya</td><td>52.8</td><td>43.1</td></tr><tr><td>Village Devri</td><td>52.6</td><td>42.6</td></tr><tr><td>Village Muhanaa</td><td>51.6</td><td>42.5</td></tr><tr><td>Village Basan</td><td>53.0</td><td>42.0</td></tr><tr><td>Standard</td><td>55</td><td>45</td></tr></tbody></table></div></div>					Location	Day	Night	Near Mine Office	61.9	49.5	Near Boundary in South	58.9	47.6	Standard	75	70	Location	Day	Night	Village Kolkarhiya	52.8	43.1	Village Devri	52.6	42.6	Village Muhanaa	51.6	42.5	Village Basan	53.0	42.0	Standard	55	45
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20)	Noise and Vibration Monitoring and Preservation	The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The workers engaged in operation of HEMM, etc. should be provided with ear plugs /Muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ Laborers are working without personal protective equipment.	Complied	<ul style="list-style-type: none"><li>• Ear Plugs, Mask and other PPES has been provided to workers engaged in mining.</li><li>• Onsite tool box talk is being conducted on daily basis to create awareness regarding safety and health aspect.</li><li>• Work Zone Noise level monitoring is being carried out by MoEF&amp;CC approved laboratory and Noise level are well within the prescribed norms. Please refer <b>Annexure-11</b> for more detail of Noise level.</li></ul> <div><div>Work zone noise Halfyesrly Average results in dBA</div><table><thead><tr><th>Location</th><th>Noise Level (dBA)</th></tr></thead><tbody><tr><td>Haul Road area</td><td>61.3</td></tr><tr><td>Mine Site area</td><td>65.0</td></tr><tr><td>Dump area</td><td>60.0</td></tr><tr><td>Standard</td><td>85</td></tr></tbody></table></div>	Location	Noise Level (dBA)	Haul Road area	61.3	Mine Site area	65.0	Dump area	60.0	Standard	85																				
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V. Mining Plan																																				
21)	Mining Plan	The Project Proponent shall adhere to approved mining plan, inter alia, including total exaction(quantum of mineral, waste, over burden, inter burden and top soil etc.): mining technology: lease area: scope of working (method of mining, overburden & dump management, O.B& dump mining, mineral transportation mode, ultimate depth of mining, concurrent reclamation and reclamation at mine closure: land- use of the mine lease area at various stages of mining scheme as well as at the end-of-life: etc).	Complied	<ul style="list-style-type: none"><li>All mining activities are being carried out as per approved mining plan.</li><li>Excavation quantity is maintained well within the permitted limit.</li></ul> Excavation details for the period from April 2024 to September 2024 is given below: - <table><tr><th>Month</th><th>Limestone (MT)</th><th>Over Burden (MT)</th><th>Top Soil (MT)</th></tr><tr><td>April'24</td><td>Nil</td><td>9808.61</td><td>Nil</td></tr><tr><td>May'24</td><td>Nil</td><td>Nil</td><td>Nil</td></tr><tr><td>June'24</td><td>150</td><td>Nil</td><td>Nil</td></tr><tr><td>July'24</td><td>Nil</td><td>Nil</td><td>Nil</td></tr><tr><td>Aug'24</td><td>Nil</td><td>Nil</td><td>Nil</td></tr><tr><td>Sep'24</td><td>10</td><td>Nil</td><td>Nil</td></tr><tr><td>Total</td><td>160</td><td>9808.61</td><td>Nil</td></tr></table>	Month	Limestone (MT)	Over Burden (MT)	Top Soil (MT)	April'24	Nil	9808.61	Nil	May'24	Nil	Nil	Nil	June'24	150	Nil	Nil	July'24	Nil	Nil	Nil	Aug'24	Nil	Nil	Nil	Sep'24	10	Nil	Nil	Total	160	9808.61	Nil
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22)	Mining Plan	The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved mining plan. The excavation vis-à-vis backfilling in the mine area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self-sustaining. The compliance status shall be submitted half-yearly to the MoEF&CC and its concerned Regional Office.	Complied	<ul style="list-style-type: none"><li>All mining activities are being carried out as per approved mining plan.</li><li>Compliance status is being submitted to the MoEF&amp;CC and its concerned Regional Office on Half Yearly basis regularly. Last half-yearly compliance report was sent on 22.05.2024 for the period from October 2024 to March 2024.</li></ul>																																
VI. Land Reclamation																																				
23)	Land Reclamation	The Overburden (O.B.), waste and topsoil generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should be kept active for a long period of time. The physical parameters of the OB/ waste dumps/	Complied	<ul style="list-style-type: none"><li>Overburden generated during the mining operations is being stacked at earmarked OB dump sites only.</li><li>Physical parameters of the OB dumps i.e. height, width and angle of slope being maintained in compliance of the approved mining plan as per the guidelines /circulars issued by DGMS.</li></ul>																																

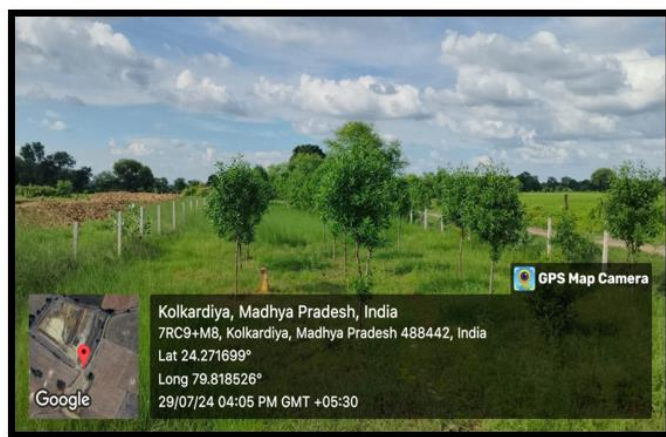
		topsoil dump like height, width, width and angle of slope shall be governed as per the approved mining plan and the guidelines/ circulars issued by D.G.M.S. The topsoil shall be used for land reclamation and plantation.		<ul style="list-style-type: none"> <li>Top soil generation quantity from mining operation in the <b>FY: 2024-25 (up to sept 24) is Nil and 2023-24 is 7503.04 MT.</b> It is being used for plantation purposes only. Please refer <b>annexure no 3</b> for photographs of the plantation done on top soil.</li> </ul>
24)	Land Reclamation	The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slop stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring filling/leveling of dump mass. In critical areas, use of geo textiles/ geo-membranes/ clay liners/ Bentonite etc. shall be undertaken for stabilization of the dump.	Complied	Noted, presently dumps are active and slope of dumps will be vegetated in scientific manner with suitable native species, gullies will be formed on slopes and filling and levelling of dump mass will be done with the help of dozer/ compactor once dumps become inactive.
25)	Land Reclamation	Catch drains, setting tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and top soil/ OB/ Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.	Complied	Garland drain and setting tank has been constructed to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water will be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/sedimentation sumps etc. is being de-silted regularly and after proper sedimentation mine water is utilized for various purposes. Please refer <b>annexure 2</b> for photographs of the same.



26)	Land Reclamation	Check dams of appropriate size, gradient and length shall be constructed around mine pit OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept be kept of designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its. Adjoining area which shall also help in providing adequate retention period thereby allowing proper settling of sediments/ silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.	Complied	Garland drain and setting tank has been constructed to prevent storm run-off and sediment flow into adjoining water bodies. The drains/sedimentation sumps etc. is being de-silted regularly and after proper sedimentation mine water is utilized for various purposes. Please refer <b>annexure 2</b> for photographs of the same.
<b>VII. Transportation</b>				
27)	Land Reclamation	No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitation. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All cost resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal state govt. department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal state govt. department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation	Complied	Noted. No transportation of minerals is being done through roads passing villages/habitation.

		load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testing centers. (If applicable in case of road transport).		
28)	Land Reclamation	The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer Points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipment's like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emission.	Partially Complied	<ul style="list-style-type: none"> <li>Regular water sprinkling is being done on haul roads and loading and unloading point to control the fugitive emission.</li> <li>Ambient air quality monitoring is being carried out on regular basis by NABL accredited laboratory and air pollution level are under norms.</li> <li>Six monthly average Ambient air quality and fugitive emission monitoring reports for the period: October-23 to March-24 are enclosed as <b><u>Annexure-5 &amp; 6.</u></b></li> </ul> <p>Following measures will also be implemented in near future as Mining operation has been commenced on 21.03.2022, mine is in development stage and limestone is being produced from float limestone lumps found on ground surface only.</p> <ul style="list-style-type: none"> <li>Water sprinkling system will be provided at the dump hopper to control the fugitive emission.</li> <li>Crusher has yet not been installed and upon installation, air pollution control equipment's like bag filters, dry fogging system will be installed at crusher to avoid generation of dust while transportation.</li> </ul>
<b>VIII. Green Belt</b>				
29)	Green Belt	The project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease.	Being Complied	<ul style="list-style-type: none"> <li>Greenbelt development is a continual &amp; ongoing process, Plantation has been initiated around the mine lease and covered 2.65 ha area with 6632 no's of saplings up to September' 2024.</li> <li>Green belt in 7.5 m lease periphery/boundary (Area 32.392 ha) will be developed within first five-year subject to availability of</li> </ul>

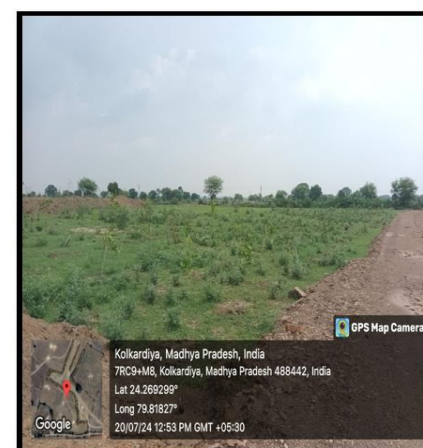
		<p>The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan.</p>	<p>land as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan. Photographs of plantation is enclosed as <b>Annexure-12</b></p>
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Plantation done in FY 22-23 (132 nos in 0.05 ha)



Plantation done in FY 23-24 (2500 nos sapling in 1.0 ha)



Plantation Photographs of Kolkarihya Limestone Mine FY 2024-25 (4000 nos sapling in 1.6 ha.)

30)	Green Belt	The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community area etc. by Planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/ Tribal Welfare Department/ Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per hectare. Adequate budgetary provision shall be made for protection and care of trees.	Being Complied	<ul style="list-style-type: none"> <li>•Greenbelt development is a continual &amp; ongoing process. Plantation has been initiated around the mine lease and covered 2.65 ha area with 6632 nos saplings up to September' 2024.</li> <li>•Green belt in 7.5m lease periphery/boundary (Area 32.392 ha) including the area of 2.516 ha covering 50mt safety barrier of the village road will be done within n first five years of the commencement of the mine.</li> <li>• Out of total mined-out area of 340.63 ha; at the conceptual stage 306.78 ha area will be reclaimed and rehabilitated by plantation on backfilled area. Remaining 33.85 ha area of pit B will be reclaimed by sub grade limestone for future use. Bench slope area of 74.95 ha shall also be brought under green belt development.</li> </ul> Please refer <b>annexure-12</b> for photographs of plantation.
31)	Green Belt	The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.	Complied	Not Applicable. There is no grazing land in Mining Lease.
<b>IX. Public Hearing and Human Health Issues</b>				
32)	Public Hearing	Project Proponent shall make	Complied	<ul style="list-style-type: none"> <li>• All workers engaged belongs to local area and they are living</li> </ul>

	and Human Health Issues	provision for the housing for workers/labors or shall contract labor camps within/ outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche for kids etc. The housing may be provided in the form of temporary structure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.		<p>in their own houses, therefore temporary structure/ hutments are not required.</p> <ul style="list-style-type: none"> <li>Employees are residing in colony situated at Hatta Tehsil, where all basic Infrastructure facilities are available.</li> </ul> <p>There is no temporary structure /hutment has been constructed.</p>
<b>X. Corporate Environment Responsibility (CER)</b>				
33)		The Project Proponent shall submit the time- bond action plan to the concerned regional office of the Ministry within 6 months from the date of issuance of environment clearance for undertaking the activities committed during public consultation by the project proponent and as discussed by the EAC, in terms of the provisions of the MoEF&CC Office Memorandum No.22-65/217-IA.III dated 30 September, 2020. The action plan shall be implemented within three years of commencement of the project.	Being Complied	Activities proposed for CER will be implemented in a time bound manner and three years action plan of activities committed during public consultation has been submitted through EC compliance dated 20.05.2023. However please refer <b>annexure-1</b> and compliance of <b>Sp. condition no 1</b> for status of budget spent under the CER activities committed.
<b>XI. Miscellaneous</b>				
34)	Miscellaneous	The Project Proponent Shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned regional officer of the MoEF&CC.	Agreed to comply	Digital processing report of the entire lease area will be submitted with due course of time as Mining operation has been commenced on 21.03.2022.
35)	Miscellaneous	The Project Authorities should inform to the Regional Officer regarding date	Complied	Noted, Final Approval of the Project by MoEFCC is 18.02.2022.

		of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.		Land development work started on 21.03.2022. Financial Closure dates for SMPL project to be informed.
36)	Miscellaneous	The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MoEFCC & its concerned Regional Officer, Central Pollution Control Board and State Pollution Control Board.	Complied	Six monthly compliance report has been submitted to the MoEF&CC & it's concerned Regional Officer, Central Pollution Control Board and State Pollution Control Board. Last half-yearly compliance report was sent on 22.05.2024 for the period from October 2024 to March-24.
37)	Miscellaneous	A separate 'Environmental Management Cell' with suitable qualified manpower should be set up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientist and Mining Engineers shall be appointed and submit a report to RO, MoEF&CC.	Complied	A separate environmental management cell with qualified personnel is already established.
38)	Miscellaneous	The concerned Regional of the MoEF&CC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEF&CC officer(s) by furnishing the requisite data /information/monitoring reports.	Agree to Comply	Noted, Full cooperation will be extended to the MoEF&CC officer(s) by furnishing the requisite data /information/monitoring reports.
39)	Miscellaneous	In pursuant to Ministry's O.M No 22-34/2018-IA.III dated 16.01.2020 to comply with the direction made by Hon'ble Supreme Court on 8.01.2020 in W.P. (Civil) No 114/2014 in the matter common cause vs Union of India, the mining lease holder shall	Complied	Noted and all applicable laws will be followed.

		after ceasing mining operations, undertake regressing the mining area and any other area which may have been disturbed due to other mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.		
40)	Miscellaneous	The Ministry or any other competent authority may alter/ modify the above conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Complied	Noted and all applicable laws and direction will be followed.
41)	Miscellaneous	Concealing facture to comply with any or submission of false/ fabricated data and of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Complied	Noted and all applicable laws and direction will be followed.





**JSW Cement Limited Hatta MP Project**

**Better Everyday**

**CSR progress**





Sl. No.	Themes	Activities	No. of beneficiaries	Budget Spent
1	Health	Eye Camp at Kolkarhiya	103	52,100
2		General Health Camp at Kolkarahiya	155	24,745
3		Eye Camp at Devri	97	56,400
4		General Health Camp at Devri	144	23,925
5		Eye camp at Gaisabad	170	47,400
6		General Health Camp at Gaisabad	230	35,295
7		Eye Camp at Garreh	104	56,600
8		General Health Camp at Garreh	127	21,845
9		Supply of essential medical equipment at Devri & Gaisabad health Sub Centre	4000	185,956

Sl. No.	Themes	Activities	No. of beneficiaries	Budget Spent
10	Education	Distribution of Education Kits in Kolkarahiya, Devri, Raikra and Kuluwa, Gaisabad	800	552,871
11		Renovation of Gaisabad Anganwadi & Harijan Tola Primary School	130	767,000
12		Supply of 425 School benches and 5 sets of office furniture in Govt. Schools in Kolkarhiya, Devri, Raikra & Gaisabad Villages	850	2,146,625
13		Setting up Science laboratory-Physics, Chemistry & Bio in 1 Senior Secondary School (Gaisabad) : Furniture work & Lab equipment purchase	496	650,312
14		Inaugural function for handover the laboratories' equipment and furniture set up works at Higher Secondary School, Gaisabad		6,008
15		Digital Smart class installation at Higher Secondary School Gaisabad & Middle School Kolkarhiya	105	395,300
16		Renovation of Middle School Kolkarhiya	197	13,73,856
17		Renovation of Higher Secondary School Gaisabad	610	16,54,585

Sl. No.	Themes	Activities	No. of beneficiaries	Budget Spent
18	<b>Livelihood</b>	Grant support in paying the electricity connection and transformer charges for establishing and running Dona/Pattal making machine unit run of Kalumar village of Jabera Janpad Panchayat, district Damoh	30	261,441
19	<b>Women Empowerment</b>	Support provided to Nai Duniya Newspaper towards Nayika Samman Programme	55	118,000
20		Celebration of International Women's day	200	73,170
21	<b>Sports &amp; Culture</b>	Payment to Panna Collector-Towards celebration of Gaurav Diwas on the occasion of Chatrsal Jayanti		200,000
22	<b>Water</b>	Borewell & 3 Hand Pump Installation (Kolkarahiya & Raikra Villages) & 1 Borewell and motorized system setup at Devri Village	350	407,561
23	<b>Plant purchase, Plantation with tree guard installation</b>	2500 Plantation and tree guard installation in Schools and Mine area		918,500
24	<b>Rural Infrastructure</b>	Installation of 100 Street Solar lights at Village Kolkarhiya, Devri, Raikra and Kuluwa, Sanjay Nagar, Garreh, Gaisabad, Mahua Kheda, Bichua Chkka, Baleh & Adanwara Villages	6000	1,684,467
<b>Total</b>			<b>14,953</b>	<b>11,723,962</b>

### Eye Check Up Camp was Organized at Gaisabad (Plant area)

Total : 160 people availed the services;  
34 patient were treated for vision correction & given spectacles,  
42 patient were given medicine  
47 have been referred for cataract surgery  
37 people found normal eye





### Health Check Up Camp was Organized at Gaisabad (Plant area)

Total : 230 people availed the services;

All patient were given the required medicine which includes the treatment of fever, Sugar, Cough, Stomach pain, Blood Pressure, Calcium, Multi vitamins tablets etc.

The patient were provided the check up of Hemoglobin ,Blood Pressure, Blood Sugar, Pulse Rate, SpO2,Height and Weight





### Eye Check Up Camp was Organized at Kolkarhiya (Mines area)

Total : 106 people availed the services;  
42 patient were treated for vision correction & given spectacles,  
62 patient were given medicine  
27 have been referred for cataract surgery





### Eye Check Up Camp was Organized at Garreh (Plant area)

Total : 104 people availed the services;  
49 patient were treated for vision correction & given spectacles,  
91 patient were given medicine  
42 have been referred for cataract surgery





## Health Check Up Camp was Organized at Garreh (Mines area)

Total : 127 people availed the services;

All patient were given the required medicine which includes the treatment of fever, Sugar, Cough, Stomach pain, Blood Pressure, Calcium, Multi vitamins tablets etc.

The patient were provided the check up of Hemoglobin ,Blood Pressure, Blood Sugar, Pulse Rate, SpO2,Height and Weight





### Eye Check Up Camp was Organized at Devri (Plant area)

Total : 97 people availed the services;

52 patient were treated for vision correction & given spectacles,

60 patient were given medicine

32 have been referred for cataract surgery





## Health Check Up Camp was Organized at Devri (Mines area)

Total : 144 people availed the services;

All patient were given the required medicine which includes the treatment of fever, Sugar, Cough, Stomach pain, Blood Pressure, Calcium, Multi vitamins tablets etc.

The patient were provided the check up of Hemoglobin ,Blood Pressure, Blood Sugar, Pulse Rate, SpO2,Height and Weight







**100 Solar street lights** installed at Gaisabad (28), Kolkarahiya (22), Devri (8), Kulwa (2), Raikra (10), Garreh (9), Sanjay Nagar (4), Mahua Kheda (3), Bichua Chakka (2), Basan (2), Adanwara (6), Baleh (4)

Around 8000 villagers are getting benefitted.



### Anganwadi renovation: Pictures before renovation



### Anganwadi pictures after renovation





### Primary School renovation: before



### Primary School renovation: after







Anganwadi renovation work at Gaisabad Village



**800 Educational Kits** were distributed in Primary and Middle Schools at Gaisabad, Kolkarahiya, Devri and Raikra Village ( School bag, Note books, Pen, Pencil, Color box, Dental kits, Eraser and Sharpener)



**Installation of 350 School Benches** (Dual Two -Seater) with writing table in 8 Schools of surrounding villages in Mines and Plant area (Kolkarahiya, Devri, Raikra & Gaisabad) : **700 students beneficiaries**



Borewell cum Handpump installation Work



Gaisabad Village



Kolkarhiya Village



Raikra Village



Devri Village



Plantation work at Mines and Plant area





## Photographs : Preparation of Dona & Pattal in Jabera Dona Pattal Unit

Springway Mining Pvt. Ltd.

A Unit of **JSW** Cement



Preparation of Pattal



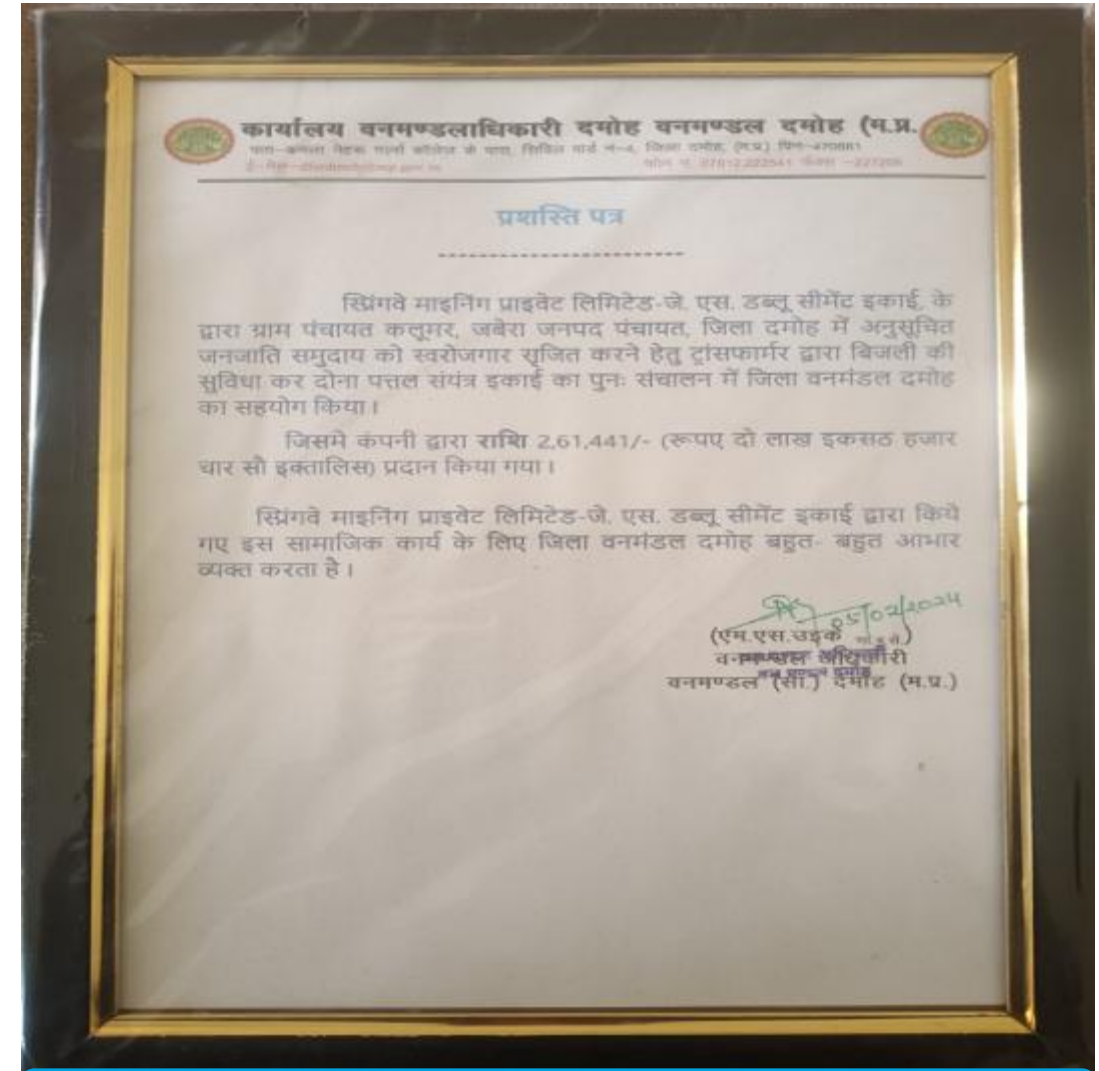
Preparation of Dona



Finished Product



Mr. Ashray Upadhyay, Range Officer, Forest Dept. Giving the appreciation letter to Mr. Amit, Manager, CSR



Appreciation certificate



## Photographs : Supply of equipment at Gaisabad Sub Health Center

Springway Mining Pvt. Ltd.

A Unit of **JSW** Cement

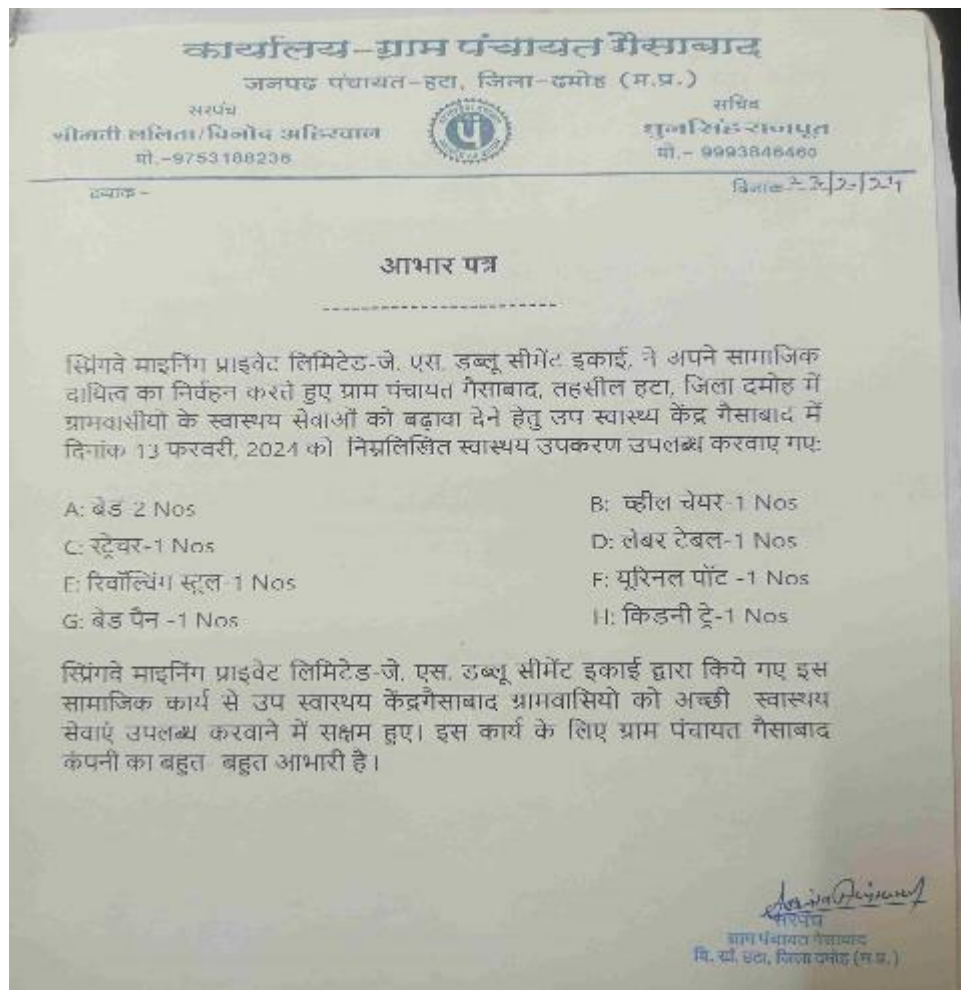


Donating and installation of medical equipment to Gaisabad health Sub-center in presence of Sarpanch, CHO & Villagers

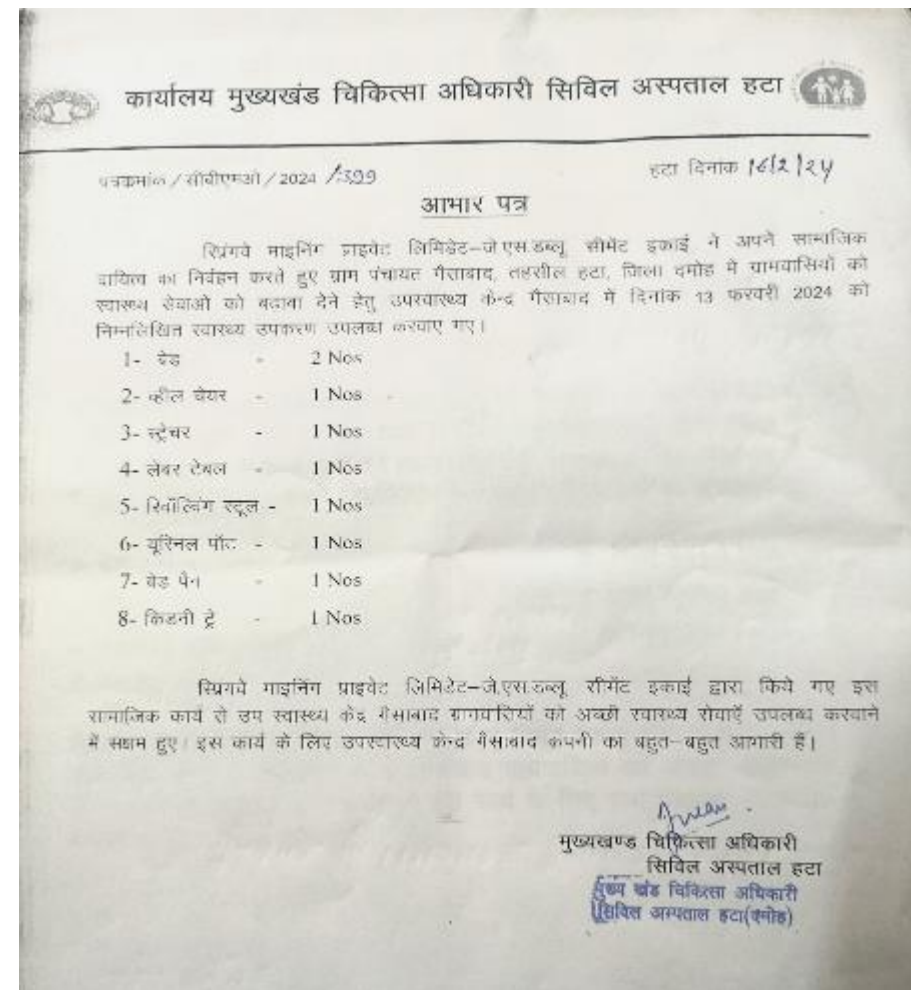


[https://www.youtube.com/watch?v=FK1Hv\\_YVwnk](https://www.youtube.com/watch?v=FK1Hv_YVwnk)

Media coverage in local electronic media



Appreciation letter received from Panchayat, Gaisabad



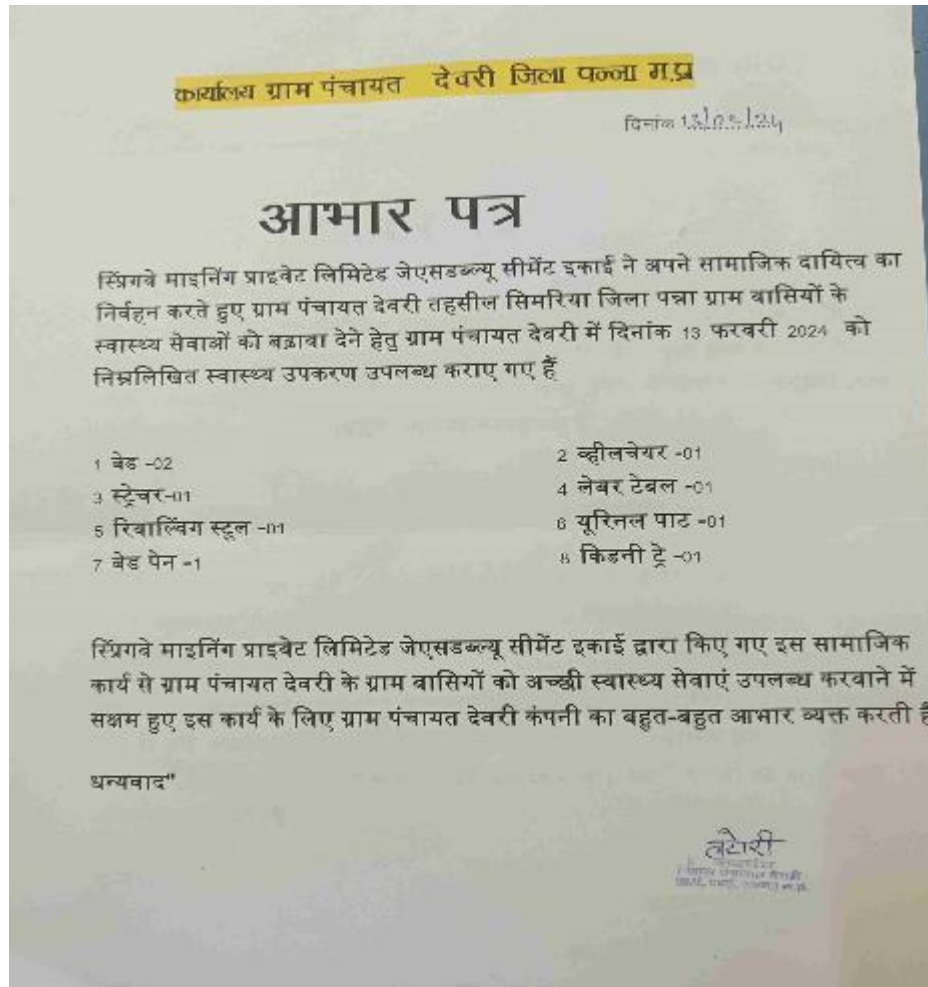
Appreciation letter received from Block Medical Officer, Hatta (Gaisabad)



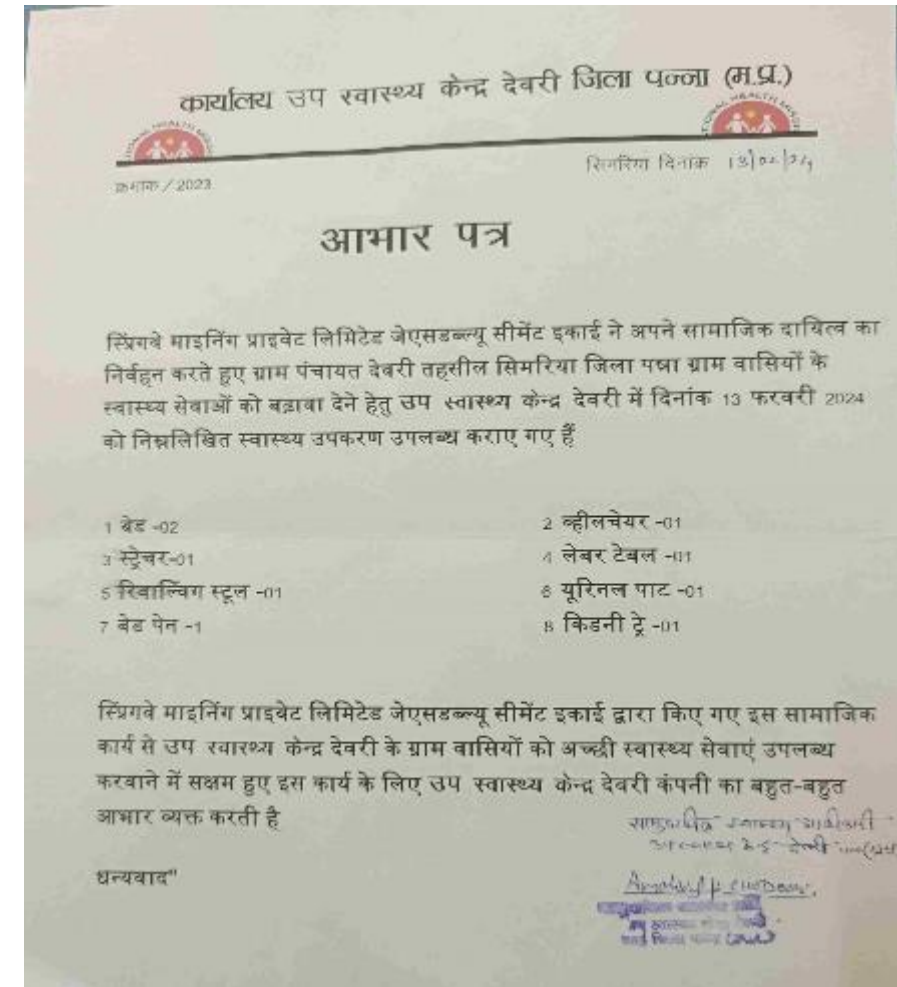


**Donating and installation of medical equipment to Devri health Sub-center in presence of Sarpanch, CHO & Villagers**





Appreciation letter received from Panchayat, Deori



Appreciation letter received from Sub Health Center, Deori



## Photographs : International Women's day Celebration





## Photographs : International Women's day Celebration





## Photographs : International Women's day Celebration





## Glimpse: Gaisabad Higher Secondary School lab inauguration



Cutting of inaugural ribbon by Mr. Mayank Shrivastav, Project head & Mr. Santosh Tiwari, Principal, School



JSWCL and School staff group photo during inaugural





Address by Mr. Mayank Shrivastav, Project Head, JSWCL, Hatta



Opening remarks by Mr. Amit Kumar, Manager, CSR, JSWCL, Hatta



# Glimpse: Gaisabad Higher Secondary School lab inauguration



**Address by Mrs. Chaurasia ,Teacher  
Gaisabad School**



**Appreciation letter received by Mr. Mayank  
Shrivastav, Project head & Amit Kumar,  
Manager, CSR**



**Address by Ms. Aarti, Student  
Gaisabad School**



**Address by Mr. Santosh Tiwari,  
Principal, Gaisabad School**



**Address by Mr. Amit Kumar, Manager,  
CSR, JSWCL, Hatta**





**Chemistry laboratory**



**Biology laboratory set up with model and furniture**



**Compound microscope**



**Physics laboratory with equipment**



**Biology laboratory set up with specimen and furniture**



**Physics laboratory with telescope, equipment and furniture**



## Glimpse: Kolkarhiya School Renovation



BEFORE



Middle section building before renovation



Primary section building before renovation

AFTER



Middle section building after renovation



Primary section building after renovation



## Glimpse: Kolkarhiya School Renovation

BEFORE



Primary and Kitchen section building before renovation



Toilet section building before renovation

AFTER



Primary and Kitchen section building after renovation



Toilet section building after renovation



## Glimpse: Kolkarhiya School Renovation



**Renovation completed of Kolkarhiya Middle School located at Mines area : 197 students got benefited**



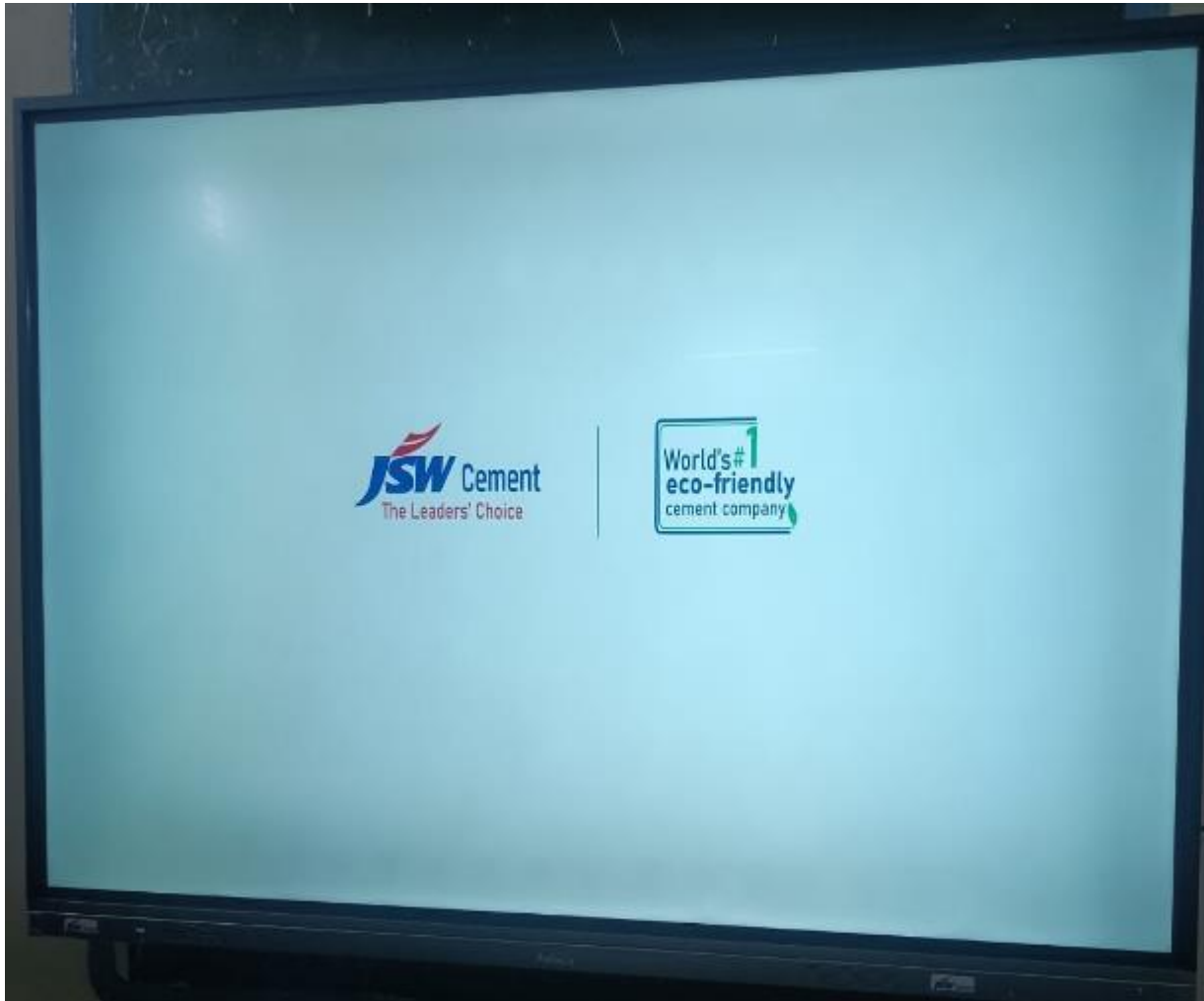


Main School building Middle & Primary Section



Ground development and boundary wall renovation





Installation of Smart class in Middle Section



Usage of Smart class by the Students



## Glimpse: Gaisabad Higher Secondary School Renovation

BEFORE



Higher Secondary School Main Gate Section before renovation

AFTER



Higher Secondary School Main Gate Section after renovation

**BEFORE**



**Primary School Section before renovation & Cycle stand**

**AFTER**



**Primary School Section after renovation & Cycle stand**



## Glimpse: Gaisabad Higher Secondary School Renovation



Renovated Higher Secondary School building sections



Classroom section





Newly build cycle stand



Branding granite stone



School Corridor





Installation of Smart class in the School



Usage of Smart class by the Students



## स्प्रिंगवे माइनिंग प्राइवेट लिमिटेड -जे. एस. डब्लू सीमेंट द्वारा निशुल्क सोलर लाइटों को लगाया गया



कम्पनी द्वारा सतत इन ग्राम पंचायतों में किया जाता रहेगा।

हिंदुस्तान समाज दमोह विजय यादव दमोह हटा। स्प्रिंगवे माइनिंग प्राइवेट लिमिटेड -जे. एस. डब्लू सीमेंट की इकाई के द्वारा निशुल्क बीस सोलर स्ट्रीट लाइटों की गैसाबाद ग्राम पंचायत में स्थापना स्प्रिंगवे माइनिंग प्राइवेट लिमिटेड -जे. एस. डब्लू सीमेंट की इकाई के द्वारा संभावित प्लांट गैसाबाद ग्राम पंचायत एवं आसपास के ग्रामों में विभिन्न ग्रामीण विकास के कार्यों के तहत ग्राम पंचायत गैसाबाद में पंचायत द्वारा बताया गए स्थानों पर बीस सोलर लाइट आमजन उपयोग हेतु जगहों पर कंपनी द्वारा निशुल्क सोलर स्ट्रीट लाइटों की गैसाबाद ग्राम पंचायत में स्थापना की गयी 7 कम्पनी ने बताया की इस प्रकार के ग्रामीण विकास के कार्य

## नेत्र शिविर का हुआ आयोजन

हटा@पत्रिका. स्प्रिंगवे जीएसडब्ल्यू माइनिंग प्राइवेट लिमिटेड सीमेंट द्वारा निः शुल्क नेत्र शिविर का आयोजन गैसाबाद ग्राम पंचायत में रखा गया। जिसमें निःशुल्क नेत्र जांच व परामर्श किया गया। इसमें ग्रामीण क्षेत्रों के सभी लोगों ने आंखों की जांच की गई डॉक्टरों की टीम के द्वारा आवश्यकता अनुसार उनके निःशुल्क चश्मा और दवाइयों वितरण की गई। इस अवसर पर ग्राम पंचायत के जनप्रतिनिधि

## स्वास्थ्य शिविर में 230 मरीजों की जांच कर दवाइयां दी

दमोह। गैसाबाद में बस स्टैंड के पास बालक प्राथमिक शाला परिसर में निशुल्क स्वास्थ्य जांच एवं परामर्श शिविर का आयोजन स्प्रिंगवे माइनिंग प्राइवेट लिमिटेड की ओर से किया गया। यह कंपनी जेएसडब्ल्यू सीमेंट की एक इकाई है। शिविर में सुबह 9.30 बजे से दोपहर 1.30 बजे तक 230 से ज्यादा मरीज पहुंचे। जिनकी होमोग्लोबिन, शुगर, बीपी, बुखार, खासी, जुकाम की जांचें और दवाइयां निशुल्क प्रदान की गई। इस शिविर में मिशन होस्पिटल दमोह के डॉक्टरों द्वारा इलाज किया गया। जिसमें मरीजों की बीपी शुगर और होमोग्लोबिन की जांच की गई। 230 लोगों ने इस शिविर का लाभ उठाया। महिलाओं ने सबसे ज्यादा इस शिविर में भाग लेकर अपना स्वास्थ्य परीक्षण करवाया।



हटा - स्प्रिंगवे माइनिंग प्राइवेट लिमिटेड JSW सीमेंट कम्पनी गैसाबाद



## गैसाबाद में सरकारी स्कूल के बच्चों को पठन सामग्री प्रदान की

हटा। गैसाबाद क्षेत्र में अगामी दिनों में स्थापित होने वाली सीमेंट कंपनी के द्वारा अपने प्रारंभिक काल से ही समाज कल्याण के शाला कार्य करना शुरू कर दिया है। कंपनी द्वारा ग्राम के सरकारी स्कूल में दर्ज विद्यार्थियों को स्कूल से जोड़े रखने अथवा पठन सामग्री प्रदान की गई। जिसके अंतर्गत प्राथमिक बालक शाला गैसाबाद, आदिवासी टोला गैसाबाद, कन्या शाला गैसाबाद में दर्ज विद्यार्थियों के लिए मुख्य रूप से स्कूल में आमंत्रित कर उन्हें बैग, कॉपीयां, पेन, पेंसिल, रबर, कटर, ब्रश, कलर्स एवं एक डेटल किट प्रदान की गई। यह सामग्री पाठ्य पुस्तकें मिलने पर स्कूल खुलने पर प्रतिदिन स्कूल आने एवं मन लगाकर पढ़ाई करने पर अन्य पुरस्कार दिए जाने की बात कही गई। इस अवसर पर स्प्रिंगवे माइनिंग प्राइवेट लिमिटेड कंपनी के अधिकारियों एवं स्कूल स्टाफ की उपस्थिति रही।



उपस्वास्थ्य केंद्र गैसाबाद और देवरी में दिये गए उपकरण



## 170 मरीजों का हुआ स्वास्थ्य परीक्षण

दोपहर 1 बजे तक शिविर का आयोजन किया गया। होमोग्लोबिन, शुगर, बीपी बुखार, खासी, जुकाम की जांच की गई। साथ ही वयाओं का वितरण किया गया। इसमें 170 मरीजों ने भाग लिया।



**THANK YOU**

## Annexure- 1 list of Operational Villages

List of operational Villages of JSWCL Proposed Plant and Mines area									
SN	Name of the village	Block	District	HHs	Male Population	Female Population	Total Population	No. of SHGs	SHG membership
1	Adanwara	Hatta	Damoh	158	377	326	703	12	122
2	Garreh	Hatta	Damoh	231	492	458	950	9	99
3	Gaisabad	Hatta	Damoh	855	1796	1690	3486	21	231
4	Basan	Hatta	Damoh	54	101	95	196	3	31
5	Bichhuwa	Hatta	Damoh	66	129	114	243	1	10
6	Mahuwa Kheda	Hatta	Damoh	36	61	66	127	1	12
7	Itwa Chakka	Hatta	Damoh	80	214	185	399	1	11
8	Baleh	Hatta	Damoh	207	461	411	872	10	151
9	Husena	Hatta	Damoh	56	203	91	112	3	31
9	Kuluwa	Pawai	Panna	103	230	220	450	3	30
10	Kolkarhiya	Pawai	Panna	320	701	623	1324	12	135
11	Deori	Pawai	Panna	285	618	518	1136	11	141
12	Raikara	Pawai	Panna	293	664	595	1259	9	99
<b>Total</b>				<b>2744</b>	<b>6047</b>	<b>5392</b>	<b>11257</b>	<b>96</b>	<b>1103</b>

**Note: Population data as per census -2011**

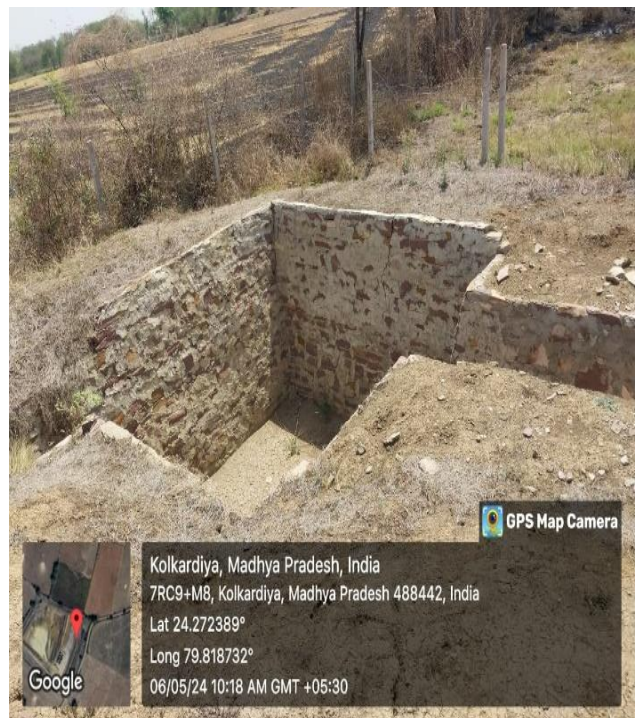




**Photographs of the protected Garland drain by wire fencing along the pit area**



**Siltation Pit -1 (L&W 5.3 and Depth 4.3 meter)**



**Siltation Pit -2 (L&W 5.5 and Depth 2.8 meter)**





Kolkardiya, Madhya Pradesh, India  
Unnamed Road, Kolkardiya, Madhya Pradesh 488442, India  
Lat 24.267277°  
Long 79.81531°  
06/05/24 11:37 AM GMT +05:30

**Photographs of bund along with proposed excavation area**



## Photographs of Plantation on Top Soil











Details of Medical Examination (Under Rule 29B of MMR 1961)

Kolkarhiya Limestone Mines

M/s Springway Mining Pvt Ltd

S.No.	Emp. Name	Organization Name	Type of Appointment	Designation	Date of Medical Examination
1	Mr. Durgesh Pal	M/s Ramesh Chandra Grover	Contractual	Tipper Operator	4/9/2024
2	Mr. Suresh Dubey	M/s Ramesh Chandra Grover	Contractual	Water Tanker Operator	4/9/2024
3	Mr. Devendra Pal	M/s Ramesh Chandra Grover	Contractual	Tipper Operator	4/9/2024
4	Mr. Ramesh Chodhary	M/s Ramesh Chandra Grover	Contractual	Tipper Operator	4/9/2024
5	Mr. Ayubb Khan	M/s Ramesh Chandra Grover	Contractual	Dozer Operator	4/18/2024
6	Mr. Ramnaresh Jat	M/s Ramesh Chandra Grover	Contractual	Tipper Operator	5/13/2024
7	Mr. Syamjee yadav	M/s Ramesh Chandra Grover	Contractual	Tipper Operator	5/13/2024
8	Mr. Satendra Yadav	M/s Ramesh Chandra Grover	Contractual	Tipper Operator	5/13/2024
9	Mr. Satendra Vaish	M/s Ramesh Chandra Grover	Contractual	Tipper Operator	5/27/2024
10	Mr. Pranhendra	M/s Ramesh Chandra Grover	Contractual	Tipper Operator	5/27/2024



**FORM - O**  
(See Rule 29F (2), and 29L)  
**REPORT OF MEDICAL EXAMINATION UNDER RULE 29B**  
(To be issued in triplicate)\*\*

Certificate No. ....

Certified that Shri / Shrimathi\* Durgosh pal Sto Laluan  
employed as driver .....

In ..... mine, Form B No. ....

has been examined for an initial/periodical\* medical examination. He/She \* appears to be  
22 y/male ..... years of age. The findings of the examining authority  
are given in the attached sheet. It is considered that Shri / Shrimathi\*  
Durgosh pal .....

(a) \* is medically fit for any employment in mines.

(b) \* is suffering from ..... ✓

.....  
and is medically unfit for

(i) any employment in mine ; or

(ii) any employment below ground; or

(iii) any employment or work ..... ✓

(c) \* is suffering from ..... ✓

.....  
and should get this disability\* cured / controlled and should be again examined within a period of  
..... months . \* He/She will appear for re-examination with the result of test  
of..... \* and the opinion of

..... specialist from

..... He/She\* may be permitted /not\* permitted to carry on  
his duties during this period.

Signature of the Examining authority

डॉ. (वेदि) देव शर्मा  
Name and Designation in  
एम.बी.बी. ब्लॉक लेटर्स. 8338  
मेडिकल ऑफीसर सिविल अस्पताल  
हटा, जिला- दमोह (म.प्र.)

Place:

Ch Nalpa

Date:

09/04/24

\*\* One copy of the certificate shall be handed over to the person concerned and another copy shall be sent to the manager of the mine concerned by registered post; and the third copy shall be retained by the examining authority.

FORM O (Contd.)

REPORT OF THE EXAMINING AUTHORITY

(to be filled in for every medical examination whether initial or periodical or re-examination or after cure / control of disability).

Annexure to certificate No. .... as a result of medical examination on

Identification Mark .....

Left thumb impression of the candidate,

1. General development Good / Fair / Poor.
2. Height ..... Cms. 3. Weight ..... Kgs.
4. Eyes:
  - (i) Visual acuity-Distant Vision (with or without glasses)
 

Right eye ..... Left Eye .....
  - (ii) Any organic disease of eyes: ( to ..... sted in special cases)
  - (iii) Night blindness : .....
  - (iv) Colour blindness : .....
  - (v) Squint : .....
5. Ears:
  - (i) hearing Right ear ..... Left ear .....
  - (ii) any organic disease : .....
6. Respiratory System :
 

Chest measurement :

  - (i) after full inspiration ..... Cms.
  - (ii) after full expiration ..... Cms.
7. Circulatory System :
 

Blood Pressure : .....

Pulse : .....
8. Abdomen :
 

Tenderness : .....

Liver : .....

Spleen : .....

Tumour : .....



9. Nervous System :  
History of fits or  
Epilepsy :  
Paralysis : *non*  
Mental Health :  
10. Locomotor System :  
11. Skin :  
12. Herina :  
13. Hydrocele :  
14. Any other abnormality:  
15. Urine : *(N)*  
Reaction : *(N)*  
Albumin : *Assent*  
Sugar : *Assent*  
16. Skiagram of chest : *(N)*  
17. Any other test considered necessary by the  
examining authority :  
18. Any opinion of specialists considered necessary.

Place :

*CH natta*

Date :

*09/04/24.*

Report of Medical Examination under Mines Rule 29B



(To be used in continuation with Form 0)

Certificate No.

Name:

Identification Marks:

Result of Lung Function Test (Spirometry)

Parameters	Predicted Value	Performed Value	% of Predicted
Forced Vital Capacity (FEV)			
Forced Vital Capacity 1 FEV1			
FEV 1 /FVC			
Peak Expiratory Flow			

Spirometry Report enclosed

Signature of Examination Authority



Report off Medical Examination as per the recommendations of National Safety Conferences in Mines

(To be used in continuation with Form 0)

Certificate No.

Name:

Identification Marks:

1. Cardiological Assessment

Auscultation	S1	ful
	S2	dul
	Additional Sound	∞
Electrocardiograph (12 leads)		Normal/ Abnormal

Enclosed ECG

2. Neurological Assessment

(N)

Findings	Normal/Abnormal
Superficial Reflexes	
Deep Reflexes	
Peripheral Circulation	
Vibrational Syndromes	

3. ILO Classification of Chest Radiograph:

(N)

Profusion of Pneumoconiotic opacities	Grades	Types
Present/Absent		

Enclosed Chest Radiograph

4. Audiometry Findings:

∞

Conduction Type	Left Ear	Right Ear
Ear Conduction	Normal/Abnormal	Normal/Abnormal
Bone Conduction.	Normal/Abnormal	Normal/Abnormal

Enclosed Audiometry Report.

5. Pathological/Microbiological Investigations:

S.No	Tests	Findings
1.	Blood- Tc, Dc, Hb, ESR, Platelets	WNL/Abnormal
2.	Blood Sugar- Fasting & PP	WNL/Abnormal
3.	Lipid profile	WNL/Abnormal
4.	Blood Urea, Creatinine	WNL/Abnormal
5.	Urine Routine	WNL/Abnormal
6.	Stool Routine	WNL/Abnormal

Enclosed Investigation Reports.

6. Special Tests for Mn exposure

Behavioral Disturbances		Present/ Not Present
Neurological Disturbances	Speech Defect	Present/ Not Present
	Tremor	Present/ Not Present
	Adiadocokinesia	Present/ Not Present
	Emotional Changes	Present/ Not Present

7. Any other Special Test Required:

Signature of Examination Authority

डॉ. (कॉरेज) आर. पी. कोरी  
एम.बी.बी.एस. रजि.नं. 8338  
मेडिकल ऑफिसर सिविल अस्पताल  
हटा, जिला- दमोह (म.प्र.)



**FORM - O**  
(See Rule 29F (2), and 29L)  
**REPORT OF MEDICAL EXAMINATION UNDER RULE 29B**  
(To be issued in triplicate)\*\*

Certificate No. ....

Certified that Shri / Shrimathi\* ..... Suresh Duba s/o Bary Prasad.  
employed as Driver .....

In ..... mine, Form B No. ....

has been examined for an initial/periodical\* medical examination. He/She \* appears to be  
49 y/male ..... years of age. The findings of the examining authority  
are given in the attached sheet. It is considered that Shri / Shrimathi\*  
Suresh Duba .....

(a) \* is medically fit for any employment in mines.

(b) \* is suffering from .....  
X

and is medically unfit for

(i) any employment in mine ; or

(ii) any employment below ground; or

(iii) any employment or work .....  
X

(c) \* is suffering from .....

and should get this disability\* cured / controlled and should be again examined within a period of  
..... months . \* He/She will appear for re-examination with the result of test  
of..... \* and the opinion of

..... specialist from

..... He/She\* may be permitted /not\* permitted to carry on  
his duties during this period.

Signature of the Examining authority

डॉ. (के.एल.) आर. पी. कोरी  
Name and Designation in  
Block Letters. रजि.नं. 8338  
मेडिकल ऑफिसर सिविल अस्पताल  
हटा, जिला- दमोह (म.प्र.)

Place:

e/1 Hadda

Date:

09/04/24.

\*\* One copy of the certificate shall be handed over to the person concerned and another copy shall be sent to the manager of the mine concerned by registered post; and the third copy shall be retained by the examining authority.

FORM O (Contd.)

REPORT OF THE EXAMINING AUTHORITY

(to be filled in for every medical examination whether initial or periodical or re-examination or after cure / control of disability).

Annexure to certificate No. .... as a result of medical examination on

Identification Mark .....

Left thumb impression of the candidate,

1. General development ✓  
Good / Fair / Poor.
2. Height ..... Cms. 3. Weight.....Kgs.
4. Eyes:
  - (i) Visual acuity-Distant Vision (with or without glasses)  
 Right eye 6/6 Left Eye 6/6
  - (ii) Any organic disease of eyes: 0
  - (iii) Night blindness : 0
  - (iv) Colour blindness :
  - (v) Squint : ( to .....sted in special cases)
5. Ears:
  - (i) hearing Right ear 10  
 Left ear .....
  - (ii) any organic disease :
6. Respiratory System :
  - Chest measurement :
  - (i) after full inspiration 84 Cms.
  - (ii) after full expiration 82 Cms.
7. Circulatory System :
  - Blood Pressure : 128/86
  - Pulse : 79
8. Abdomen :
  - Tenderness : 10
  - Liver :
  - Spleen :
  - Tumour :



9. Nervous System :  
History of fits or  
Epilepsy :  
Paralysis :  
Mental Health : *not clinically*
10. Locomotor System :
11. Skin :
12. Herina :
13. Hydrocele :
14. Any other abnormality:
15. Urine : *(D)*  
Reaction : *(D)*  
Albumin : *Assent -*  
Sugar : *Assent -*
16. Skiagram of chest : *(b)*
17. Any other test considered necessary by the  
examining authority :
18. Any opinion of specialists considered necessary.

Place : *Chhabra*  
Date : *09/04/24*

Report of Medical Examination under Mines Rule 29B

W/A

(To be used in continuation with Form 0)

Certificate No.

Name:

Identification Marks:

Result of of Lung Function Test (Spirometry)

Parameters	Predicted Value	Performed Value	% of Predicted
Forced Vital Capacity (FEV)			
Forced Vital Capacity 1 FEV1			
FEV 1 /FVC			
Peak Expiratory Flow			

Spirometry Report enclosed

Signature of Examination Authority



Report off Medical Examination as per the recommendations of National Safety Conferences in Mines

(To be used in continuation with Form 0)

Certificate No.

Name:

Identification Marks:

1. Cardiological Assessment

Auscultation	S1	ad
	S2	ad
	Additional Sound	x
Electrocardiograph (12 leads)		Normal/ Abnormal

Enclosed ECG

2. Neurological Assessment

Findings	Normal/Abnormal
Superficial Reflexes	
Deep Reflexes	
Peripheral Circulation	
Vibrational Syndromes	

3. ILO Classification of Chest Radiograph:

Profusion of Pneumoconiotic opacities	Grades	Types
Present/Absent		

Enclosed Chest Radiograph

4. Audiometry Findings:

Conduction Type	Left Ear	Right Ear
Ear Conduction	Normal/Abnormal	Normal/Abnormal
Bone Conduction.	Normal/Abnormal	Normal/Abnormal

Enclosed Audiometry Report.

5. Pathological/Microbiological Investigations:

S.No	Tests	Findings
1.	Blood- Tc, Dc, Hb, ESR, Platelets	WNL/Abnormal
2.	Blood Sugar- Fasting & PP	WNL/Abnormal
3.	Lipid profile	WNL/Abnormal
4.	Blood Urea, Creatinine	WNL/Abnormal
5.	Urine Routine	WNL/Abnormal
6.	Stool Routine	WNL/Abnormal

Enclosed Investigation Reports.

6. Special Tests for Mn exposure

Behavioral Disturbances		Present/ Not Present
Neurological Disturbances	Speech Defect	Present/ Not Present
	Tremor	Present/ Not Present
	Adiadocokinesia	Present/ Not Present
	Emotional Changes	Present/ Not Present

7. Any other Special Test Required:

Signature of Examination Authority

डॉ. (केप्टन) आर. पी. कोरी  
एम.बी.बी.एस. रजि.नं. 8338  
मेडिकल ऑफीसर सिविल अस्पताल  
हटा, जिला- दमोह (म.प्र.)



**FORM - O**  
(See Rule 29F (2), and 29L)  
**REPORT OF MEDICAL EXAMINATION UNDER RULE 29B**  
(To be issued in triplicate)\*\*

Certificate No. ....

Certified that Shri / Shrimathi\* ..... Dubendra pal Singh Lakhan  
employed as Driver .....

In ..... mine, Form B No. ....  
has been examined for an initial/periodical\* medical examination. He/She \* appears to be  
24 y/male ..... years of age. The findings of the examining authority  
are given in the attached sheet. It is considered that Shri / Shrimathi\*  
Dubendra pal .....

(a) \* is medically fit for any employment in mines.

(b) \* is suffering from ..... X

and is medically unfit for

(i) any employment in mine ; or

(ii) any employment below ground; or

(iii) any employment or work ..... X

(c) \* is suffering from .....

and should get this disability\* cured / controlled and should be again examined within a period of  
..... months . \* He/She will appear for re-examination with the result of test  
of..... \* and the opinion of

..... specialist from

..... He/She\* may be permitted /not\* permitted to carry on  
his duties during this period.

Signature of the Examining authority

डॉ. (केपिन) अरु. पी. कोरी  
Name and Designation in Block Letters  
मेडिकल ऑफिसर सिविल अस्पताल  
हटा, जिला- दमोह (म.प्र.)

Place: Chhatta

Date: 09/04/24

\*\* One copy of the certificate shall be handed over to the person concerned and another copy shall be sent to the manager of the mine concerned by registered post; and the third copy shall be retained by the examining authority.

FORM O (Contd.)

REPORT OF THE EXAMINING AUTHORITY

(to be filled in for every medical examination whether initial or periodical or re-examination or after cure / control of disability).

Annexure to certificate No. .... as a result of medical examination on

Identification Mark .....

Left thumb impression of the candidate,

1. General development ✓ Good / Fair / Poor.
2. Height ..... Cms.                      3. Weight ..... Kgs.
4. Eyes: (19)
  - (i) Visual acuity-Distant Vision (with or without glasses)  
Right eye ..... 6/6 ..... Left Eye ..... 6/6 .....
  - (ii) Any organic disease of eyes: (15)
  - (iii) Night blindness :
  - (iv) Colour blindness :
  - (v) Squint : ( to                      sted in special cases)
5. Ears:
  - (i) hearing Right ear ..... (19) .....  
Left ear .....  
(ii) any organic disease :
6. Respiratory System :  
Chest measurement :
  - (i) after full inspiration ..... 84 ..... Cms.
  - (ii) after full expiration ..... 81 ..... Cms.
7. Circulatory System :  
Blood Pressure : 128/79  
Pulse : 74
8. Abdomen :  
Tenderness : (19)  
Liver :  
Spleen :  
Tumour :



9. Nervous System :  
History of fits or :  
Epilepsy : NAD  
Paralysis :  
Mental Health :
10. Locomotor System :
11. Skin :
12. Herina :
13. Hydrocele :
14. Any other abnormality:
15. Urine : (N)  
Reaction : (N)  
Albumin : Assent  
Sugar : Assent -
16. Skiagram of chest : (N)
17. Any other test considered necessary by the  
examining authority :
18. Any opinion of specialists considered necessary.

Place : C/1 Matha.  
Date : 09/04/24

Report of Medical Examination under Mines Rule 29B

N/A

(To be used in continuation with Form 0)

Certificate No.

Name:

Identification Marks:

Result of of Lung Function Test (Spirometry)

Parameters	Predicted Value	Performed Value	% of Predicted
Forced Vital Capacity (FEV)			
Forced Vital Capacity 1 FEV1			
FEV 1 /FVC			
Peak Expiratory Flow			

Spirometry Report enclosed

Signature of Examination Authority



Report off Medical Examination as per the recommendations of National Safety Conferences in Mines

(To be used in continuation with Form 0)

Certificate No.

Name:

Identification Marks:

1. Cardiological Assessment

Auscultation	S1	<i>trb</i>
	S2	<i>rw</i>
	Additional Sound	<i>rs</i>
Electrocardiograph (12 leads)		<i>✓</i> Normal/ Abnormal

Enclosed ECG

2. Neurological Assessment

*(N)*

Findings	Normal/Abnormal
Superficial Reflexes	
Deep Reflexes	
Peripheral Circulation	
Vibrational Syndromes	

3. ILO Classification of Chest Radiograph:

*(N)*

Profusion of Pneumoconiotic opacities	Grades	Types
Present/Absent		

Enclosed Chest Radiograph

4. Audiometry Findings:

*∞*

Conduction Type	Left Ear	Right Ear
Ear Conduction	Normal/Abnormal	Normal/Abnormal
Bone Conduction.	Normal/Abnormal	Normal/Abnormal

Enclosed Audiometry Report.

5. Pathological/Microbiological Investigations:

S.No	Tests	Findings
1.	Blood- Tc, Dc, Hb, ESR, Platelets	WNL/Abnormal
2.	Blood Sugar- Fasting & PP	WNL/Abnormal
3.	Lipid profile	WNL/Abnormal
4.	Blood Urea, Creatinine	WNL/Abnormal
5.	Urine Routine	WNL/Abnormal
6.	Stool Routine	WNL/Abnormal

Enclosed Investigation Reports.

6. Special Tests for Mn exposure

Behavioral Disturbances		Present/ Not Present
Neurological Disturbances	Speech Defect	Present/ Not Present
	Tremor	Present/ Not Present
	Adiadocokinesia	Present/ Not Present
	Emotional Changes	Present/ Not Present

7. Any other Special Test Required:

Signature of Examination Authority

डॉ. (केप्टन) आर. पी. कोरी  
एम.बी.बी.एस. रजि.नं. 8338  
मेडिकल ऑफिसर सिविल अस्पताल  
हटा, जिला- दमोह (म.प्र.)



**FORM - O**  
(See Rule 29F (2), and 29L)  
**REPORT OF MEDICAL EXAMINATION UNDER RULE 29B**  
(To be issued in triplicate)\*\*

Certificate No. ....

Certified that Shri / Shrimathi\* .....

employed as .....

In ..... mine, Form B No. ....

has been examined for an initial/periodical\* medical examination. He/She \* appears to be  
..... years of age. The findings of the examining authority  
are given in the attached sheet. It is considered that Shri / Shrimathi\*  
.....

(a) \* is medically fit for any employment in mines.

(b) \* is suffering from .....

.....  
and is medically unfit for

(i) any employment in mine ; or

(ii) any employment below ground; or

(iii) any employment or work .....

(c) \* is suffering from .....

.....  
and should get this disability\* cured / controlled and should be again examined within a period of  
..... months. \* He/She will appear for re-examination with the result of test  
of..... \* and the opinion of

..... specialist from

..... He/She\* may be permitted /not\* permitted to carry on  
his duties during this period.



Signature of the Examining authority

डॉ. (के.एल.) आर. पी. कोरी  
एम्.बी.बी.एस. एम.सी.डी. 8338  
मेडिकल ऑफिसर सिविल अस्पताल  
हटा, जिला- दमोह (म.प्र.)

Place:

Date:

\*\*

One copy of the certificate shall be handed over to the person concerned and another copy shall be sent to the manager of the mine concerned by registered post; and the third copy shall be retained by the examining authority.

FORM O (Contd.)

REPORT OF THE EXAMINING AUTHORITY

(to be filled in for every medical examination whether initial or periodical or re-examination or after cure / control of disability).

Annexure to certificate No. .... as a result of medical examination on .....

Identification Mark .....  
.....

Left thumb impression of the candidate,

1. General development ✓ Good / Fair / Poor.
2. Height ..... Cms.                      3. Weight ..... Kgs.
4. Eyes: (13)
  - (i) Visual acuity-Distant Vision (with or without glasses)  
Right eye ..... 6/6 ..... Left Eye ..... 6/6 .....
  - (ii) Any organic disease of eyes: (13)
  - (iii) Night blindness : .....
  - (iv) Colour blindness : .....
  - (v) Squint : ( to ..... sted in special cases)
5. Ears: (10)
  - (i) hearing Right ear .....  
Left ear .....
  - (ii) any organic disease : .....
6. Respiratory System :  
Chest measurement : 38  
(i) after full inspiration ..... Cms.  
(ii) after full expiration ..... 34 ..... Cms.
7. Circulatory System :  
Blood Pressure : 122/80 mmHg  
Pulse : 76 /min
8. Abdomen : (10)  
Tenderness : .....  
Liver : .....  
Spleen : .....  
Tumour : .....



9. Nervous System :  
History of fits or  
Epilepsy :  
Paralysis :  
Mental Health :  
10. Locomotor System :  
11. Skin :  
12. Herina :  
13. Hydrocele :  
14. Any other abnormality:  
15. Urine :  
Reaction :  
Albumin :  
Sugar :  
16. Skiagram of chest :  
17. Any other test considered necessary by the  
examining authority :  
18. Any opinion of specialists considered necessary.

Place :  
Date :

Ch Hatt  
09/01/24

Report of Medical Examination under Mines Rule 29B

29B

(To be used in continuation with Form 0)

Certificate No.

Name:

Identification Marks:

Result of Lung Function Test (Spirometry)

Parameters	Predicted Value	Performed Value	% of Predicted
Forced Vital Capacity (FEV)			
Forced Vital Capacity 1 FEV1			
FEV 1 /FVC			
Peak Expiratory Flow			

Spirometry Report enclosed

Signature of Examination Authority

Report off Medical Examination as per the recommendations of National Safety Conferences in Mines

(To be used in continuation with Form 0)

Certificate No.

Name:

Identification Marks:

1. Cardiological Assessment

Auscultation	S1	full
	S2	end -
	Additional Sound	
Electrocardiograph (12 leads)		Normal/ Abnormal

Enclosed ECG

2. Neurological Assessment

Findings	Normal/Abnormal
Superficial Reflexes	
Deep Reflexes	
Peripheral Circulation	
Vibrational Syndromes	

3. ILO Classification of Chest Radiograph:

Profusion of Pneumoconiotic opacities	Grades	Types
Present/Absent		

Enclosed Chest Radiograph

4. Audiometry Findings:

Conduction Type	Left Ear	Right Ear
Ear Conduction	Normal/Abnormal	Normal/Abnormal
Bone Conduction.	Normal/Abnormal	Normal/Abnormal

Enclosed Audiometry Report.



5. Pathological/Microbiological Investigations:


S.No	Tests	Findings
1.	Blood- Tc, Dc, Hb, ESR, Platelets	WNL/Abnormal
2.	Blood Sugar- Fasting & PP	WNL/Abnormal
3.	Lipid profile	WNL/Abnormal
4.	Blood Urea, Creatinine	WNL/Abnormal
5.	Urine Routine	WNL/Abnormal
6.	Stool Routine	WNL/Abnormal

Enclosed Investigation Reports.

6. Special Tests for Mn exposure

Behavioral Disturbances		Present/ Not Present
Neurological Disturbances	Speech Defect	Present/ Not Present
	Tremor	Present/ Not Present
	Adiadocokinesia	Present/ Not Present
	Emotional Changes	Present/ Not Present

7. Any other Special Test Required:

  
 डॉ. (के.पि.) आर. पी. कोरी  
 Signature of Examination Authority  
 मेडिकल ऑफीसर सिविल अस्पताल  
 हटा, जिला- दमोह (म.प्र.)

**FORM - O**  
(See Rule 29F (2), and 29L)  
**REPORT OF MEDICAL EXAMINATION UNDER RULE 29B**  
(To be issued in triplicate)\*\*

Certificate No. ....  
Certified that Shri / Shrimathi\* Aayub Khan sb masud Khan  
employed as .....  
In Cement Factory mine, Form B No. ....  
has been examined for an initial/periodical\* medical examination. He/She \* appears to be  
20 years years of age. The findings of the examining authority  
are given in the attached sheet. It is considered that Shri / Shrimathi\*  
.....

- (a) \* is medically fit for any employment in mines.  
(b) \* is suffering from 2 .....

.....  
and is medically unfit for

- (i) any employment in mine ; or  
(ii) any employment below ground; or  
(iii) any employment or work .....

- (c) \* is suffering from 2 .....

.....  
and should get this disability\* cured / controlled and should be again examined within a period of  
..... months. \* He/She will appear for re-examination with the result of test  
of..... \* and the opinion of  
..... specialist from  
..... He/She\* may be permitted /not\* permitted to carry on  
his duties during this period.

Signature of the Examining authority

डॉ. (मेडिकल) अमर सिंह  
एम.बी.बी.एस. डिप्लोमा 8338  
मेडिकल ऑफिसर सिविल अस्पताल  
हटा, जिला- दमोह (म.प्र.)

Place: Chhabra

Date: 18/04/24

\*\* One copy of the certificate shall be handed over to the person concerned and another copy shall be sent to the manager of the mine concerned by registered post; and the third copy shall be retained by the examining authority.

FORM O (Contd.)

REPORT OF THE EXAMINING AUTHORITY

(to be filled in for every medical examination whether initial or periodical or re-examination or after cure / control of disability).

Annexure to certificate No. .... as a result of medical examination on .....

Identification Mark .....

Left thumb impression of the candidate,

1. General development ✓ Good / Fair / Poor.
2. Height ..... Cms. 3. Weight.....Kgs.
4. Eyes:
  - (i) Visual acuity-Distant Vision (with or without glasses)  
 Right eye ..... 6/6 ..... Left Eye ..... 6/6 .....
  - (ii) Any organic disease of eyes: (N)
  - (iii) Night blindness : (N)
  - (iv) Colour blindness : (N)
  - (v) Squint : ( to ..... sted in special cases)
5. Ears: (N)
  - (i) hearing Right ear .....  
 Left ear .....
  - (ii) any organic disease :
6. Respiratory System :
  - Chest measurement : 80
  - (i) after full inspiration ..... Cms.
  - (ii) after full expiration ..... 94 cm ..... Cms.
7. Circulatory System :
  - Blood Pressure : 120/80 mmHg
  - Pulse : 76/min
8. Abdomen : (N)
  - Tenderness : (N)
  - Liver : (N)
  - Spleen : (N)
  - Tumour : (N)



9. Nervous System :  
History of fits or  
Epilepsy :  
Paralysis :  
Mental Health : *non clinically*
10. Locomotor System :
11. Skin :
12. Herina :
13. Hydrocele :
14. Any other abnormality:
15. Urine : *(N)*  
Reaction : *(N)*  
Albumin : *Ascent -*  
Sugar : *absent*
16. Skiagram of chest : *(N)*
17. Any other test considered necessary by the  
examining authority :
18. Any opinion of specialists considered necessary.

Place : *enclabz*  
Date : *18/01/24*

Report of Medical Examination under Mines Rule 29B



(To be used in continuation with Form 0)

Certificate No.

Name:

Identification Marks:

Result of of Lung Function Test (Spirometry)

Parameters	Predicted Value	Performed Value	% of Predicted
Forced Vital Capacity (FEV)			
Forced Vital Capacity 1 FEV1			
FEV 1 /FVC			
Peak Expiratory Flow			

Spirometry Report enclosed

Signature of Examination Authority

Report off Medical Examination as per the recommendations of National Safety Conferences in Mines


(To be used in continuation with Form 0)

Certificate No.

Name:

Identification Marks:

1. Cardiological Assessment

Auscultation	S1	
	S2	
	Additional Sound	
Electrocardiograph (12 leads)		Normal/ Abnormal

Enclosed ECG

2. Neurological Assessment

Findings	Normal/Abnormal
Superficial Reflexes	
Deep Reflexes	
Peripheral Circulation	
Vibrational Syndromes	

3. ILO Classification of Chest Radiograph:

Profusion of Pneumoconiotic opacities	Grades	Types
Present/Absent		

Enclosed Chest Radiograph

4. Audiometry Findings:

Conduction Type	Left Ear	Right Ear
Ear Conduction	Normal/Abnormal	Normal/Abnormal
Bone Conduction.	Normal/Abnormal	Normal/Abnormal

Enclosed Audiometry Report.



5. Pathological/Microbiological Investigations:

S.No	Tests	Findings
1.	Blood- Tc, Dc, Hb, ESR, Platelets	WNL/Abnormal
2.	Blood Sugar- Fasting & PP	WNL/Abnormal
3.	Lipid profile	WNL/Abnormal
4.	Blood Urea, Creatinine	WNL/Abnormal
5.	Urine Routine	WNL/Abnormal
6.	Stool Routine	WNL/Abnormal

Enclosed Investigation Reports.

6. Special Tests for Mn exposure

Behavioral Disturbances		Present/ Not Present
Neurological Disturbances	Speech Defect	Present/ Not Present
	Tremor	Present/ Not Present
	Adiadocokinesia	Present/ Not Present
	Emotional Changes	Present/ Not Present

7. Any other Special Test Required:

Signature of Examination Authority  
 डा. (मेडि) आर. पी. कोरा  
 एम.बी.बी.एस. रजि.नं. 8338  
 मेडिकल ऑफीसर सिविल अस्पताल  
 हटा, जिला- दमोड (म.प्र.)

**FORM - O**  
(See Rule 29F (2), and 29L)  
**REPORT OF MEDICAL EXAMINATION UNDER RULE 29B**  
(To be issued in triplicate)\*\*

Certificate No. ....

Certified that Shri / Shrimathi\* ..... Ram. narayash Jadhav, S/o Janardhan -  
employed as ..... metrol .....

In ..... J. Shree ..... mine, Form B No. ....

has been examined for an initial/periodical\* medical examination. He/She \* appears to be  
..... 24.4.2014 ..... years of age. The findings of the examining authority  
are given in the attached sheet. It is considered that Shri / Shrimathi\*  
.....

(a) \* is medically fit for any employment in mines.

(b) \* is suffering from ..... X .....

and is medically unfit for

(i) any employment in mine ; or X

(ii) any employment below ground; or

(iii) any employment or work ..... X .....

(c) \* is suffering from ..... X .....

and should get this disability\* cured / controlled and should be again examined within a period of  
..... months. \* He/She will appear for re-examination with the result of test  
of ..... \* and the opinion of

..... specialist from

..... He/She\* may be permitted /not\* permitted to carry on  
his duties during this period.

Signature of the Examining authority

डॉ. (के.वि.) आर. पी. कोरी

एम.बी.बी.एस. एम.डी. 8338

मेडिकल ऑफिसर डिप्ट. अस्पताल

हटा, जिला- दमोह (म.प्र.)

Place:

CH Hadda

Date:

13/05/14

\*\* One copy of the certificate shall be handed over to the person concerned and another copy shall be sent to the manager of the mine concerned by registered post; and the third copy shall be retained by the examining authority.

FORM O (Contd.)

REPORT OF THE EXAMINING AUTHORITY

(to be filled in for every medical examination whether initial or periodical or re-examination or after cure / control of disability).

Annexure to certificate No. .... as a result of medical examination on

Identification Mark .....

Left thumb impression of the candidate,

1. General development ✓  
Good / Fair / Poor.
2. Height 166..... Cms. 3. Weight 52.....Kgs.
4. Eyes:  
(i) Visual acuity-Distant Vision (with or without glasses)  
Right eye 6/6..... Left Eye 6/6.....
- (ii) Any organic disease of eyes: (W)
- (iii) Night blindness : (W)
- (iv) Colour blindness : (W)
- (v) Squint : ( to ..... sted in special cases)
5. Ears:  
(i) hearing Right ear (W).....  
Left ear (W).....
- (ii) any organic disease : (W)
6. Respiratory System : (W)  
Chest measurement : (W)  
(i) after full inspiration 38..... Cms.  
(ii) after full expiration 44..... Cms.
7. Circulatory System : (W)  
Blood Pressure : 120/80  
Pulse : 76
8. Abdomen : (W)  
Tenderness : 1  
Liver : (W)  
Spleen : (W)  
Tumour : (W)



9. Nervous System :  
History of fits or  
Epilepsy :  
Paralysis :  
Mental Health :  
10. Locomotor System : *WAD.*  
11. Skin :  
12. Herina :  
13. Hydrocele :  
14. Any other abnormality:  
15. Urine : *(W)*  
Reaction : *(W)*  
Albumin : *Absent*  
Sugar : *Absent*  
16. Skiagram of chest : *(W)*  
17. Any other test considered necessary by the  
examining authority :  
18. Any opinion of specialists considered necessary.

Place :

*CH - Natta.*

Date :

*23/03/24*

Report of Medical Examination under Mines Rule 29B



(To be used in continuation with Form 0)

Certificate No.

Name:

Identification Marks:

Result of of Lung Function Test (Spirometry)

Parameters	Predicted Value	Performed Value	% of Predicted
Forced Vital Capacity (FEV)			
Forced Vital Capacity 1 FEV1			
FEV 1 /FVC			
Peak Expiratory Flow			

Spirometry Report enclosed

Signature of Examination Authority

Report off Medical Examination as per the recommendations of National Safety Conferences in Mines

(To be used in continuation with Form 0)

Certificate No.

Name:

Identification Marks:

1. Cardiological Assessment

Auscultation	S1	<i>7 mls</i> <i>ane</i>
	S2	
	Additional Sound	
Electrocardiograph (12 leads)		<i>✓</i> Normal/ Abnormal

Enclosed ECG

2. Neurological Assessment

Findings	Normal/Abnormal
Superficial Reflexes	
Deep Reflexes	
Peripheral Circulation	
Vibrational Syndromes	

3. ILO Classification of Chest Radiograph:

Profusion of Pneumoconiotic opacities	Grades	Types
Present/Absent		

Enolood Choot Radiograph

4. Audiometry Findings:

Conduction Type	Left Ear	Right Ear
Ear Conduction	Normal/Abnormal	Normal/Abnormal
Bone Conduction.	Normal/Abnormal	Normal/Abnormal

Enclosed Audiometry Report.



5. Pathological/Microbiological Investigations:

S.No	Tests	Findings
1.	Blood- Tc, Dc, Hb, ESR, Platelets	WNL/Abnormal
2.	Blood Sugar- Fasting & PP	WNL/Abnormal
3.	Lipid profile	WNL/Abnormal
4.	Blood Urea, Creatinine	WNL/Abnormal
5.	Urine Routine	WNL/Abnormal
6.	Stool Routine	WNL/Abnormal

Enclosed Investigation Reports.

6. Special Tests for Mn exposure

Behavioral Disturbances		Present/ Not Present
Neurological Disturbances	Speech Defect	Present/ Not Present
	Tremor	Present/ Not Present
	Adiadocokinesia	Present/ Not Present
	Emotional Changes	Present/ Not Present

7. Any other Special Test Required:

Signature of Examination Authority

डॉ. (के.एल.) आर. पी. कोरी  
एम.बी.बी.एस. रजि.नं. 8338  
मेडिकल ऑफीसर सिविल अस्पताल  
हटा, जिला- दमोह (म.प्र.)

**FORM - O**  
(See Rule 29F (2), and 29L)  
**REPORT OF MEDICAL EXAMINATION UNDER RULE 29B**  
(To be issued in triplicate)\*\*

Certificate No. ....

Certified that Shri / Shrimathi\* Shriyans ji yadav sto Ramnikan  
employed as Driver .....

In 22/5/2024 mine, Form B No. ....

has been examined for an initial/periodical\* medical examination. He/She \* appears to be  
22/5/2024 years of age. The findings of the examining authority  
are given in the attached sheet. It is considered that Shri / Shrimathi\*  
.....

(a) \* is medically fit for any employment in mines.

(b) \* is suffering from .....

and is medically unfit for .....

(i) any employment in mine ; or

(ii) any employment below ground; or

(iii) any employment or work .....

(c) \* is suffering from .....

and should get this disability\* cured / controlled and should be again examined within a period of  
..... months. \* He/She will appear for re-examination with the result of test  
of..... \* and the opinion of

..... specialist from .....  
..... He/She\* may be permitted /not\* permitted to carry on  
his duties during this period.

Signature of the Examining authority

डॉ. (के.के.) आर. पी. कोरी

एम.बी.बी.एस. एम.डी. (मेडिकल) एम.एस. (मेडिकल) एम.एच.  
मेडिकल ऑफीस, बिराहा हॉस्पिटल  
हटा, जिला- दमोह (म.प्र.)

Place:

Ch. Nalwa

Date:

13/05/24

\*\*

One copy of the certificate shall be handed over to the person concerned and another copy shall be sent to the manager of the mine concerned by registered post; and the third copy shall be retained by the examining authority.

FORM O (Contd.)

REPORT OF THE EXAMINING AUTHORITY

(to be filled in for every medical examination whether initial or periodical or re-examination or after cure / control of disability).

Annexure to certificate No. .... as a result of medical examination on .....

Identification Mark .....

Left thumb impression of the candidate,

1. General development ✓  
Good / Fair / Poor.
2. Height 177 Cms. 3. Weight 53 Kgs.
4. Eyes:
  - (i) Visual acuity-Distant Vision (with or without glasses)
 

Right eye 6/6
Left Eye 6/6
  - (ii) Any organic disease of eyes: (N)
  - (iii) Night blindness : (N)
  - (iv) Colour blindness : (N)
  - (v) Squint : ( to ..... sted in special cases)
5. Ears:
  - (i) hearing Right ear (N)
  - Left ear .....
  - (ii) any organic disease :
6. Respiratory System :
 

Chest measurement : (N)
  - (i) after full inspiration 82 Cms.
  - (ii) after full expiration 78 Cms.
7. Circulatory System :
 

Blood Pressure : 130/86  
 Pulse :
8. Abdomen :
 

Tenderness : 78  
 Liver : (N)  
 Spleen :  
 Tumour :



9. Nervous System :  
History of fits or  
Epilepsy :  
Paralysis :  
Mental Health :  
10. Locomotor System : WAD  
11. Skin :  
12. Herina :  
13. Hydrocele :  
14. Any other abnormality:  
15. Urine : (W)  
Reaction : (W)  
Albumin : Absent.  
Sugar : Absent.  
16. Skiagram of chest : (W)  
17. Any other test considered necessary by the  
examining authority :  
18. Any opinion of specialists considered necessary.

Place :

Date :

CU - Dabhi  
13/05/24

Report of Medical Examination under Mines Rule 29B



(To be used in continuation with Form 0)

Certificate No.

Name:

Identification Marks:

Result of of Lung Function Test (Spirometry)

Parameters	Predicted Value	Performed Value	% of Predicted
Forced Vital Capacity (FEV)			
Forced Vital Capacity 1 FEV1			
FEV 1 /FVC			
Peak Expiratory Flow			

Spirometry Report enclosed

Signature of Examination Authority

Report off Medical Examination as per the recommendations of National Safety Conferences in Mines

(To be used in continuation with Form 0)

Certificate No.

Name:

Identification Marks:

1. Cardiological Assessment

Auscultation	S1	<i>f u</i>
	S2	<i>f u</i>
	Additional Sound	
Electrocardiograph (12 leads)		Normal/ Abnormal

Enclosed ECG

2. Neurological Assessment

Findings	Normal/Abnormal
Superficial Reflexes	
Deep Reflexes	
Peripheral Circulation	
Vibrational Syndromes	

3. ILO Classification of Chest Radiograph:

Profusion of Pneumoconiotic opacities	Grades	Types
Present/Absent		

Enclosed Chest Radiograph

4. Audiometry Findings:

Conduction Type	Left Ear	Right Ear
Ear Conduction	Normal/Abnormal	Normal/Abnormal
Bone Conduction.	Normal/Abnormal	Normal/Abnormal

Enclosed Audiometry Report.



5. Pathological/Microbiological Investigations:

S.No	Tests	Findings
1.	Blood- Tc, Dc, Hb, ESR, Platelets	WNL/Abnormal
2.	Blood Sugar- Fasting & PP	WNL/Abnormal
3.	Lipid profile	WNL/Abnormal
4.	Blood Urea, Creatinine	WNL/Abnormal
5.	Urine Routine	WNL/Abnormal
6.	Stool Routine	WNL/Abnormal

Enclosed Investigation Reports.

6. Special Tests for Mn exposure

Behavioral Disturbances		Present/ Not Present
Neurological Disturbances	Speech Defect	Present/ Not Present
	Tremor	Present/ Not Present
	Adiadocokinesia	Present/ Not Present
	Emotional Changes	Present/ Not Present

7. Any other Special Test Required:

Signature of Examination Authority  
 डॉ. (केप्टन) आर. पी. कोरी  
 एम.बी.बी.एस. रजि.नं. 8338  
 मेडिकल ऑफिसर सिविल अस्पताल  
 हटा, जिला- दमोह (म.प्र.)

**FORM - O**  
(See Rule 29F (2), and 29L)  
**REPORT OF MEDICAL EXAMINATION UNDER RULE 29B**  
(To be issued in triplicate)\*\*

Certificate No. Sahayada yada slo keera led  
Certified that Shri / Shrimathi\* .....  
employed as Driver .....  
In Cement Fielding mine, Form B No. 50721M  
has been examined for an initial/periodical\* medical examination. He/She \* appears to be .....  
..... years of age. The findings of the examining authority  
are given in the attached sheet. It is considered that Shri / Shrimathi\*  
.....

- (a) \* is medically fit for any employment in mines.  
(b) \* is suffering from y .....

and is medically unfit for

- (i) any employment in mine ; or y  
(ii) any employment below ground; or  
(iii) any employment or work y .....

- (c) \* is suffering from y .....

and should get this disability\* cured / controlled and should be again examined within a period of .....  
..... months . \* He/She will appear for re-examination with the result of test  
of..... \* and the opinion of  
..... specialist from  
..... He/She\* may be permitted /not\* permitted to carry on  
his duties during this period.

Signature of the Examining authority

डॉ. (केप्लिन) आर. पी. कोरी  
एम.बी.बी.एस. रजि. नं. 83338  
मेडिकल ऑफिसर सिविल अस्पताल  
हटा, जिला- दमोह (म.प्र.)

Place: CH Health

Date: 13/05/24

\*\* One copy of the certificate shall be handed over to the person concerned and another copy shall be sent to the manager of the mine concerned by registered post; and the third copy shall be retained by the examining authority.

FORM O (Contd.)

REPORT OF THE EXAMINING AUTHORITY

(to be filled in for every medical examination whether initial or periodical or re-examination or after cure / control of disability).

Annexure to certificate No. .... as a result of medical examination on .....

Identification Mark .....

Left thumb impression of the candidate,

1. General development ✓ Good / Fair / Poor.
2. Height 1.62 Cms. 3. Weight 46 Kgs.
4. Eyes:
  - (i) Visual acuity-Distant Vision (with or without glasses)
 

Right eye <u>6/6</u>	Left Eye <u>6/6</u>
----------------------	---------------------
  - (ii) Any organic disease of eyes: (N)
  - (iii) Night blindness : (N)
  - (iv) Colour blindness : (N)
  - (v) Squint : ( to ..... sted in special cases)
5. Ears:
  - (i) hearing Right ear (N)
  - Left ear .....
  - (ii) any organic disease : .....
6. Respiratory System : (N)
  - Chest measurement : 80
  - (i) after full inspiration ..... Cms.
  - (ii) after full expiration 76 ..... Cms.
7. Circulatory System : 122/80
  - Blood Pressure : 76
  - Pulse : hr
8. Abdomen : (N)
  - Tenderness : |
  - Liver : |
  - Spleen : |
  - Tumour : |



9. Nervous System :  
History of fits or  
Epilepsy :  
Paralysis :  
Mental Health :  
10. Locomotor System : NO  
11. Skin :  
12. Herina :  
13. Hydrocele :  
14. Any other abnormality:  
15. Urine : NO  
Reaction : NO  
Albumin : Absent  
Sugar : Absent  
16. Skiagram of chest : (N)  
17. Any other test considered necessary by the  
examining authority :  
18. Any opinion of specialists considered necessary.

Place :

Date :

CH. P. 13/05/24

2

**Report of Medical Examination under Mines Rule 29B**

(To be used in continuation with Form 0)

Certificate No.

Name:

Identification Marks:

**Result of of Lung Function Test (Spirometry)**

Parameters	Predicted Value	Performed Value	% of Predicted
Forced Vital Capacity (FEV)			
Forced Vital Capacity 1 FEV1			
FEV 1 /FVC			
Peak Expiratory Flow			

Spirometry Report enclosed

Signature of Examination Authority

Report off Medical Examination as per the recommendations of National Safety Conferences in Mines

(To be used in continuation with Form 0)

Certificate No.

Name:

Identification Marks:

1. Cardiological Assessment

Auscultation	S1	fw
	S2	fw
	Additional Sound	
Electrocardiograph (12 leads)		Normal/ Abnormal

Enclosed ECG

2. Neurological Assessment

Findings	Normal/Abnormal
Superficial Reflexes	
Deep Reflexes	
Peripheral Circulation	
Vibrational Syndromes	

3. ILO Classification of Chest Radiograph:

Profusion of Pneumoconiotic opacities	Grades	Types
Present/Absent		

Enclosed Chest Radiograph

4. Audiometry Findings:

Conduction Type	Left Ear	Right Ear
Ear Conduction	Normal/Abnormal	Normal/Abnormal
Bone Conduction.	Normal/Abnormal	Normal/Abnormal

Enclosed Audiometry Report.



5. Pathological/Microbiological Investigations:

S.No	Tests	Findings
1.	Blood- Tc, Dc, Hb, ESR, Platelets	✓ WNL/Abnormal
2.	Blood Sugar- Fasting & PP	✓ WNL/Abnormal
3.	Lipid profile	✓ WNL/Abnormal
4.	Blood Urea, Creatinine	✓ WNL/Abnormal
5.	Urine Routine	✓ WNL/Abnormal
6.	Stool Routine	✓ WNL/Abnormal

Enclosed Investigation Reports.

6. Special Tests for Mn exposure

Behavioral Disturbances		Present/ Not Present
Neurological Disturbances	Speech Defect	Present/ Not Present
	Tremor	Present/ Not Present
	Adiadocokinesia	Present/ Not Present
	Emotional Changes	Present/ Not Present

7. Any other Special Test Required:

डॉ. (केप्लर) आर. पी. कोरी  
एम.बी.बी.एस. रजि.नं. 8338  
मेडिकल ऑफिसर लिमिटेड अस्पताल  
हटा, जिला- दमोह (म.प्र.)  
Signature of Examination Authority

**FORM - O**  
(See Rule 29F (2), and 29L)  
**REPORT OF MEDICAL EXAMINATION UNDER RULE 29B**  
(To be issued in triplicate)\*\*

Certificate No. ....

Certified that Shri / Shrimathi\* .....

employed as Driver .....

In ..... mine, Form B No. ....

has been examined for an initial/periodical\* medical examination. He/She \* appears to be 26/05/24 years of age. The findings of the examining authority are given in the attached sheet. It is considered that Shri / Shrimathi\* .....

(a) \* is medically fit for any employment in mines.

(b) \* is suffering from X .....

and is medically unfit for

(i) any employment in mine ; or Y

(ii) any employment below ground; or

(iii) any employment or work Y .....

(c) \* is suffering from Y .....

and should get this disability\* cured / controlled and should be again examined within a period of ..... months . \* He/She will appear for re-examination with the result of test of X \* and the opinion of

..... specialist from

..... He/She\* may be permitted /not\* permitted to carry on his duties during this period.

Signature of the Examining authority

डॉ. (मेडिकल) आर. पी. कोशी  
रजि.नं. 8938  
मेडिकल ऑफिसर, सिविल अस्पताल  
हटा, जिला- दमोह (प्र.प्र.)



Place: CM Mahla

Date: 27/05/24

\*\* One copy of the certificate shall be handed over to the person concerned and another copy shall be sent to the manager of the mine concerned by registered post; and the third copy shall be retained by the examining authority.

FORM O (Contd.)

REPORT OF THE EXAMINING AUTHORITY

(to be filled in for every medical examination whether initial or periodical or re-examination or after cure / control of disability).

Annexure to certificate No. .... as a result of medical examination on .....

Identification Mark .....

Left thumb impression of the candidate,

1. General development ✓  
Good / Fair / Poor.
2. Height 158 Cms. 3. Weight 55 Kgs.
4. Eyes:
  - (i) Visual acuity-Distant Vision (with or without glasses)  
 Right eye 6/6 Left Eye 6/6
  - (ii) Any organic disease of eyes: (u)
  - (iii) Night blindness : (u)
  - (iv) Colour blindness : (u)
  - (v) Squint : ( to (u) sted in special cases)
5. Ears:
  - (i) hearing Right ear (u)  
 Left ear (u)
  - (ii) any organic disease : (u)
6. Respiratory System :
  - Chest measurement : (u)
  - (i) after full inspiration (u) Cms.
  - (ii) after full expiration (u) Cms.
7. Circulatory System :
  - Blood Pressure : BP - 124/80
  - Pulse : 76/mc
8. Abdomen : (u)
  - Tenderness : (u)
  - Liver : (u)
  - Spleen : (u)
  - Tumour : (u)



9. Nervous System :  
History of fits or  
Epilepsy :  
Paralysis :  
Mental Health :  
10. Locomotor System :  
11. Skin :  
12. Herina :  
13. Hydrocele :  
14. Any other abnormality:  
15. Urine :  
Reaction :  
Albumin :  
Sugar :  
16. Skiagram of chest :  
17. Any other test considered necessary by the  
examining authority :  
18. Any opinion of specialists considered necessary.

NAN

W  
W  
Abscent  
Abscent

W

Place : CH Nulda.  
Date : 27/05/24

Report of Medical Examination under Mines Rule 29B

(To be used in continuation with Form 0)



Certificate No.

Name:

Identification Marks:

Result of Lung Function Test (Spirometry)

Parameters	Predicted Value	Performed Value	% of Predicted
Forced Vital Capacity (FEV)			
Forced Vital Capacity 1 FEV1			
FEV 1 /FVC			
Peak Expiratory Flow			

Spirometry Report enclosed

Signature of Examination Authority

Report off Medical Examination as per the recommendations of National Safety Conferences in Mines

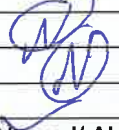
(To be used in continuation with Form 0)

Certificate No.

Name:

Identification Marks:

1. Cardiological Assessment

Auscultation	S1	
	S2	
	Additional Sound	
Electrocardiograph (12 leads)		Normal/ Abnormal

Enclosed ECG

2. Neurological Assessment

Findings	Normal/Abnormal
Superficial Reflexes	
Deep Reflexes	
Peripheral Circulation	
Vibrational Syndromes	

3. ILO Classification of Chest Radiograph:

Profusion of Pneumoconiotic opacities	Grades	Types
Present/Absent		

Enclosed Chest Radiograph

4. Audiometry Findings:

Conduction Type	Left Ear	Right Ear
Ear Conduction	Normal/Abnormal	Normal/Abnormal
Bone Conduction.	Normal/Abnormal	Normal/Abnormal

Enclosed Audiometry Report.



5. Pathological/Microbiological Investigations:


S.No	Tests	Findings
1.	Blood- Tc, Dc, Hb, ESR, Platelets	WNL/Abnormal
2.	Blood Sugar- Fasting & PP	WNL/Abnormal
3.	Lipid profile	WNL/Abnormal
4.	Blood Urea, Creatinine	WNL/Abnormal
5.	Urine Routine	WNL/Abnormal
6.	Stool Routine	WNL/Abnormal

Enclosed Investigation Reports.

6. Special Tests for Mn exposure

Behavioral Disturbances		Present/ Not Present
Neurological Disturbances	Speech Defect	Present/ Not Present
	Tremor	Present/ Not Present
	Adiadocokinesia	Present/ Not Present
	Emotional Changes	Present/ Not Present

7. Any other Special Test Required:

  
 डॉ. (केपिन) आर. पी. कोरी  
 एम बी बी एस. रजि.नं. 8338  
 मेडिकल ऑफिसर सिविल अस्पताल  
 हटा, जिला- दमोह (म.प्र.)  
 Signature of Examination Authority

**FORM - O**  
(See Rule 29F (2), and 29L)  
**REPORT OF MEDICAL EXAMINATION UNDER RULE 29B**  
(To be issued in triplicate)\*\*

Certificate No. ....

Certified that Shri / Shrimathi\* Prashant Kumar Narayan S/o. K. S. Choudhary  
employed as Driver .....

In ..... mine, Form B No. ....

has been examined for an initial/periodical\* medical examination. He/She \* appears to be  
24 years years of age. The findings of the examining authority  
are given in the attached sheet. It is considered that Shri / Shrimathi\*  
.....

(a) \* is medically fit for any employment in mines.

(b) \* is suffering from X .....

and is medically unfit for

(i) any employment in mine ; or X

(ii) any employment below ground; or X

(iii) any employment or work .....  
.....

(c) \* is suffering from X .....

and should get this disability\* cured / controlled and should be again examined within a period of  
.....months . \* He/She will appear for re-examination with the result of test  
of..... \* and the opinion of

..... specialist from

..... He/She\* may be permitted /not\* permitted to carry on  
his duties during this period.

Signature of the Examining authority

डॉ. (बेदिन) आर. पी. कोरी

Name and Designation in  
Block Letters.

एम.बी.बी.एस. रजि.नं. 8338  
महिला आधिकारिक सिविल अस्पताल  
हटा, जिला- दमोह (म.प्र.)

Place:

CU Hospital

Date:

27/05/24.

\*\* One copy of the certificate shall be handed over to the person concerned and another copy shall be sent to the manager of the mine concerned by registered post; and the third copy shall be retained by the examining authority.

FORM O (Contd.)

REPORT OF THE EXAMINING AUTHORITY

(to be filled in for every medical examination whether initial or periodical or re-examination or after cure / control of disability).

Annexure to certificate No. .... as a result of medical examination on

Identification Mark .....

Left thumb impression of the candidate,

1. General development ✓  
Good / Fair / Poor.
2. Height 177 Cms. 3. Weight 55 Kgs.
4. Eyes:
  - (i) Visual acuity-Distant Vision (with or without glasses)
 

Right eye 6/6
Left Eye 6/6
  - (ii) Any organic disease of eyes: (ND)
  - (iii) Night blindness :
  - (iv) Colour blindness :
  - (v) Squint : ( tosted in special cases)
5. Ears:
  - (i) hearing Right ear (ND)
  - Left ear .....
  - (ii) any organic disease :
6. Respiratory System :
 

Chest measurement :

  - (i) after full inspiration 84 Cms.
  - (ii) after full expiration 80 Cms.
7. Circulatory System :
 

Blood Pressure : Bp 130/85

Pulse : 78 p.m
8. Abdomen :
 

Tenderness : (ND)

Liver : -

Spleen : -

Tumour : -



9. Nervous System :  
History of fits or  
Epilepsy :  
Paralysis :  
Mental Health : NAD
10. Locomotor System :  
11. Skin :  
12. Herina :  
13. Hydrocele :  
14. Any other abnormality:  
15. Urine :  
Reaction :  
Albumin : Abscond  
Sugar : Abscond
16. Skiagram of chest :  
17. Any other test considered necessary by the  
examining authority :  
18. Any opinion of specialists considered necessary.

Place : CH Halka  
Date : 27/05/24.

Report of Medical Examination under Mines Rule 29B

(To be used in continuation with Form 0)

W/A

7

Certificate No.

Name:

Identification Marks:

Result of Lung Function Test (Spirometry)

Parameters	Predicted Value	Performed Value	% of Predicted
Forced Vital Capacity (FEV)			
Forced Vital Capacity 1 FEV1			
FEV 1 /FVC			
Peak Expiratory Flow			

Spirometry Report enclosed

Signature of Examination Authority

Report off Medical Examination as per the recommendations of National Safety Conferences in Mines

(To be used in continuation with Form 0)

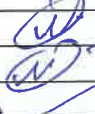
Certificate No.

Name:

Identification Marks:

ram -

1. Cardiological Assessment

Auscultation	S1	
	S2	
	Additional Sound	
Electrocardiograph (12 leads)		Normal/ Abnormal

Enclosed ECG

2. Neurological Assessment



Findings	Normal/Abnormal
Superficial Reflexes	
Deep Reflexes	
Peripheral Circulation	
Vibrational Syndromes	

3. ILO Classification of Chest Radiograph:



Profusion of Pneumoconiotic opacities	Grades	Types
Present/Absent		

Enclosed Chest Radiograph

4. Audiometry Findings:



Conduction Type	Left Ear	Right Ear
Ear Conduction	Normal/Abnormal	Normal/Abnormal
Bone Conduction.	Normal/Abnormal	Normal/Abnormal

Enclosed Audiometry Report.



5. Pathological/Microbiological Investigations:


S.No	Tests	Findings
1.	Blood- Tc, Dc, Hb, ESR, Platelets	WNL/Abnormal
2.	Blood Sugar- Fasting & PP	WNL/Abnormal
3.	Lipid profile	WNL/Abnormal
4.	Blood Urea, Creatinine	WNL/Abnormal
5.	Urine Routine	WNL/Abnormal
6.	Stool Routine	WNL/Abnormal

Enclosed Investigation Reports.

6. Special Tests for Mn exposure

Behavioral Disturbances		Present/ Not Present
Neurological Disturbances	Speech Defect	Present/ Not Present
	Tremor	Present/ Not Present
	Adiadocokinesia	Present/ Not Present
	Emotional Changes	Present/ Not Present

7. Any other Special Test Required:

  
 डॉ. (केपिन) आर. पी. कोरी  
 एम.बी.बी.एस. रजि.नं. 8338  
 मेडिकल ऑफिसर सिविल अस्पताल  
 हटा, जिला- दमोह (म.प्र.)  
 Signature of Examination Authority

## Annexure-5

### AMBIENT AIR QUALITY MONITORING QUARTERLY AVERAGE REPORT OF KOLKARHIYA LIMESTONE MINE (CORE AND BUFFER ZONE)

(Period: April 2024 - June 2024)

Sr.No.	Month	Near Mine Office/Mine Site (results in $\mu\text{g}/\text{M}^3$ )					Near Boundary in South (results in $\mu\text{g}/\text{M}^3$ )				
		PM-10	PM-2.5	SO <sub>2</sub>	Nox	CO	PM-10	PM-2.5	SO <sub>2</sub>	Nox	CO
		100	60	80	80	4 ( $\text{mg}/\text{M}^3$ )	100	60	0	80	4 ( $\text{mg}/\text{M}^3$ )
1	Apr-24	58.09	29.98	16.69	24.88	0.53	52.17	29.28	14.94	24.25	0.58
2	May-24	57.37	29.86	14.82	23.42	0.57	53.52	29.24	13.46	22.14	0.54
3	Jun-24	56.32	29.64	13.20	22.66	0.60	53.10	29.89	12.40	22.14	0.54
Quarterly Average		57.26	29.83	14.90	23.65	0.56	52.93	29.47	13.60	22.85	0.55
Sr.No.	Month	Village Kolkarhiya (results in $\mu\text{g}/\text{M}^3$ )					Village Devri (results in $\mu\text{g}/\text{M}^3$ )				
		PM-10	PM-2.5	SO <sub>2</sub>	Nox	CO	PM-10	PM-2.5	SO <sub>2</sub>	Nox	CO
		100	60	80	80	4 ( $\text{mg}/\text{M}^3$ )	100	60	80	80	4 ( $\text{mg}/\text{M}^3$ )
1	Apr-24	60.53	29.91	17.10	24.00	0.62	57.97	29.27	18.33	25.69	0.66
2	May-24	59.90	29.68	15.70	23.60	0.58	59.17	29.68	14.81	24.74	0.62
3	Jun-24	58.36	29.96	12.68	25.02	0.61	56.78	30.80	14.38	24.33	0.58
Quarterly Average		59.59	29.85	15.16	24.21	0.60	57.97	29.91	15.84	24.92	0.62
Sr.No.	Month	Village Muhanaa (results in $\mu\text{g}/\text{M}^3$ )					Village Basan (results in $\mu\text{g}/\text{M}^3$ )				
		PM-10	PM-2.5	SO <sub>2</sub>	Nox	CO	PM-10	PM-2.5	SO <sub>2</sub>	Nox	CO
		100	60	80	80	4 ( $\text{mg}/\text{M}^3$ )	100	60	80	80	4 ( $\text{mg}/\text{M}^3$ )
1	Apr-24	55.20	28.49	15.95	24.55	0.67	59.16	30.41	16.76	23.95	0.60
2	May-24	57.99	29.57	15.34	23.91	0.63	58.88	30.43	13.88	23.39	0.61
3	Jun-24	56.58	30.09	13.17	23.06	0.59	59.57	30.17	12.71	24.10	0.55
Quarterly Average		56.59	29.38	14.82	23.84	0.63	59.20	30.34	14.45	23.81	0.59

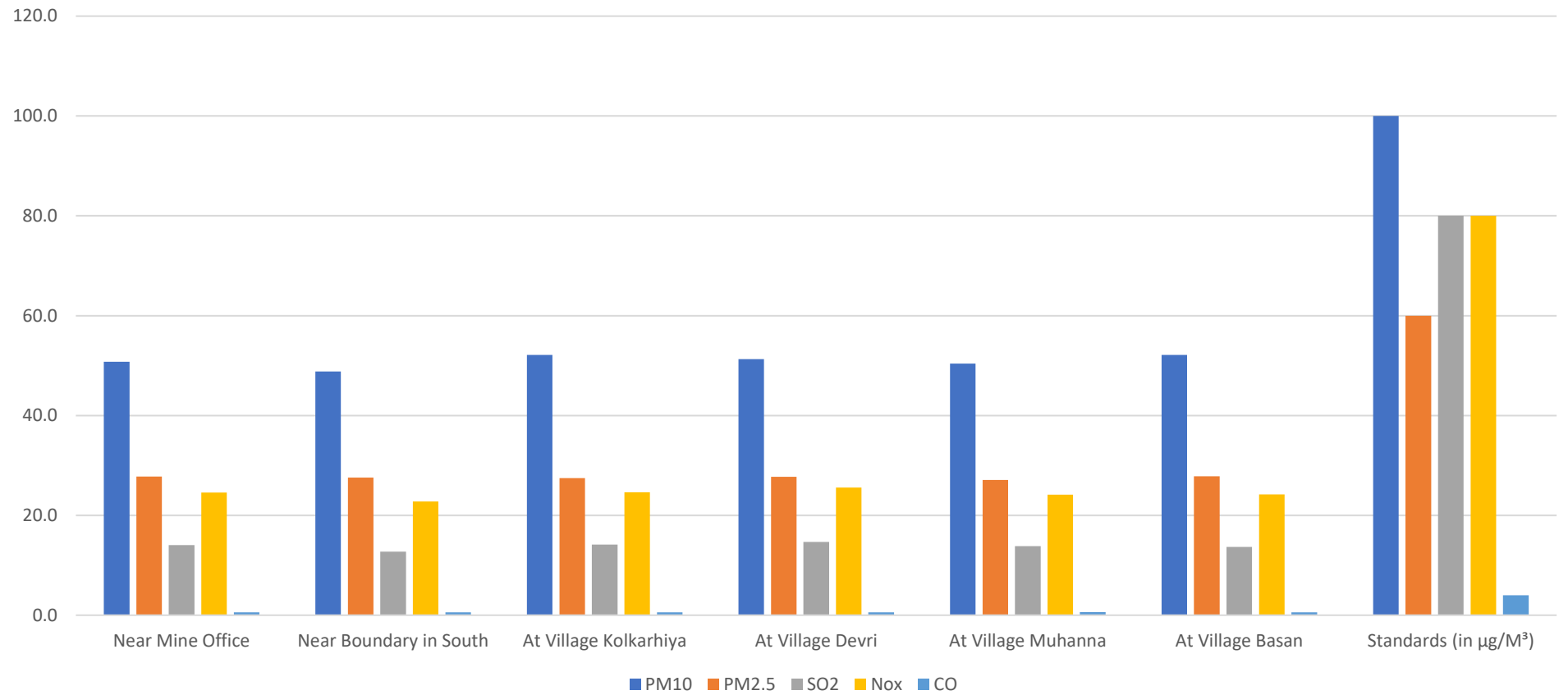
**AMBIENT AIR QUALITY MONITORING QUARTERLY AVERAGE REPORT OF KOLKARHIYA LIMESTONE MINE (CORE AND BUFFER ZONE)**

**(Period: July 2024 - September 2024)**

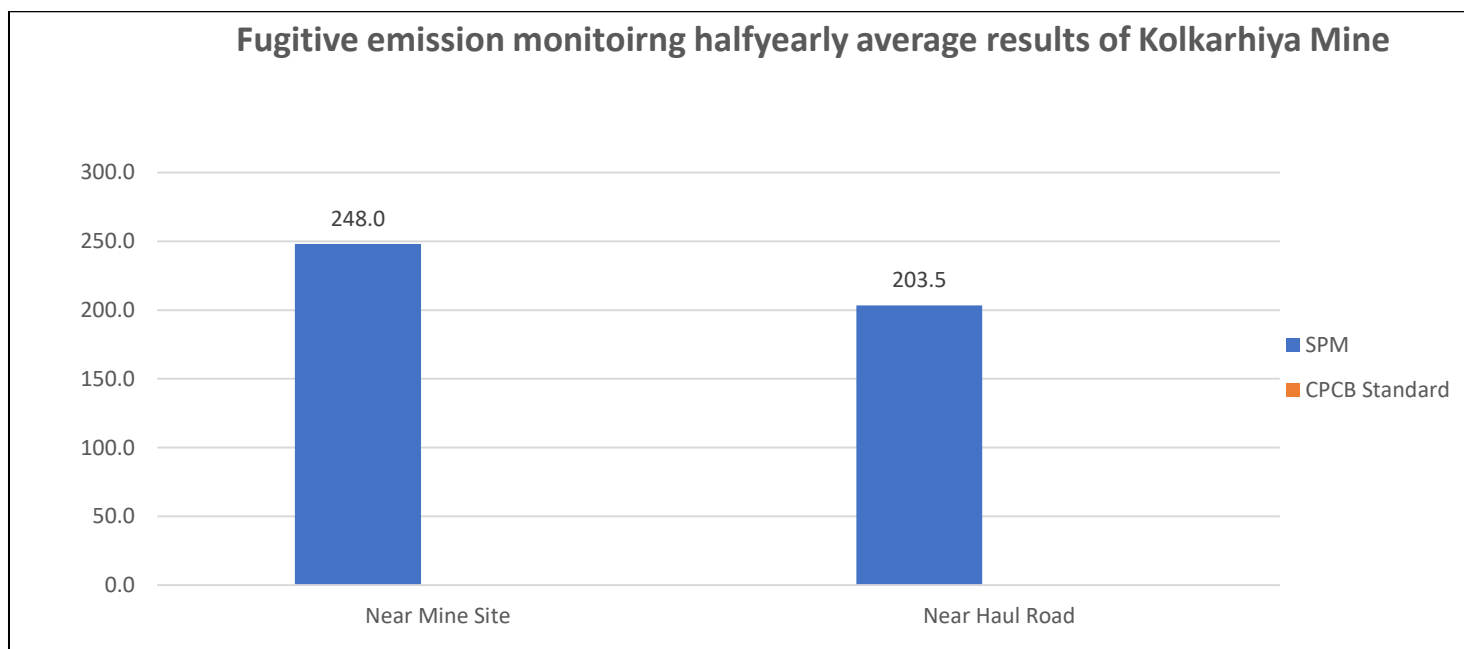
Sr.No.	Month	Near Mine Office/Mine Site (results in µg/M <sup>3</sup> )					Near Boundary in South (results in µg/M <sup>3</sup> )				
		PM-10	PM-2.5	SO <sub>2</sub>	Nox	CO	PM-10	PM-2.5	SO <sub>2</sub>	Nox	CO
		100	60	80	80	4 (mg/M <sup>3</sup> )	100	60	0	80	4 (mg/M <sup>3</sup> )
1	Jul-24	44.10	25.96	13.73	27.20	0.57	44.85	25.16	11.70	22.48	0.54
2	Aug-24	42.90	25.04	12.98	26.03	0.57	44.01	24.61	11.91	22.88	0.54
3	Sep-24	45.86	26.18	12.75	23.26	0.55	45.30	27.15	11.83	22.75	0.55
Quarterly Average		44.29	25.73	13.15	25.50	0.56	44.72	25.64	11.81	22.70	0.54
Sr.No.	Month	Village Kolkarhiya (results in µg/M <sup>3</sup> )					Village Devri (results in µg/M <sup>3</sup> )				
		PM-10	PM-2.5	SO <sub>2</sub>	Nox	CO	PM-10	PM-2.5	SO <sub>2</sub>	Nox	CO
		100	60	80	80	4 (mg/M <sup>3</sup> )	100	60	80	80	4 (mg/M <sup>3</sup> )
1	Jul-24	44.09	24.30	13.91	26.65	0.61	44.36	25.24	14.09	28.31	0.60
2	Aug-24	43.41	23.99	13.43	25.47	0.58	43.49	24.43	13.77	26.77	0.58
3	Sep-24	46.44	26.84	12.20	22.89	0.54	45.89	26.89	12.55	23.49	0.53
Quarterly Average		44.65	25.04	13.18	25.00	0.58	44.58	25.52	13.47	26.19	0.57
Sr.No.	Month	Village Muhanaa (results in µg/M <sup>3</sup> )					Village Basan (results in µg/M <sup>3</sup> )				
		PM-10	PM-2.5	SO <sub>2</sub>	Nox	CO	PM-10	PM-2.5	SO <sub>2</sub>	Nox	CO
		100	60	80	80	4 (mg/M <sup>3</sup> )	100	60	80	80	4 (mg/M <sup>3</sup> )
1	Jul-24	44.35	24.38	12.61	25.86	0.61	44.69	24.98	12.60	25.59	0.60
2	Aug-24	42.82	23.34	12.33	23.70	0.59	43.99	24.12	12.88	24.78	0.59
3	Sep-24	45.61	26.56	13.63	23.65	0.54	46.68	26.71	13.20	23.23	0.53
Quarterly Average		44.26	24.76	12.86	24.40	0.58	45.12	25.27	12.89	24.53	0.57



Ambeint Air Quality Halfyearly average results of Kolkarhiya Mine core & Buffer Zone



Fugitive emission (April-Sept 2024) average results of Kolkarhiya Mine		
Sr. No.	Name of Location/Parameter	SPM
1	Near Mine Site	248.0
2	Near Haul Road	203.5



**CPCB Standard: 5000 µg/M3**

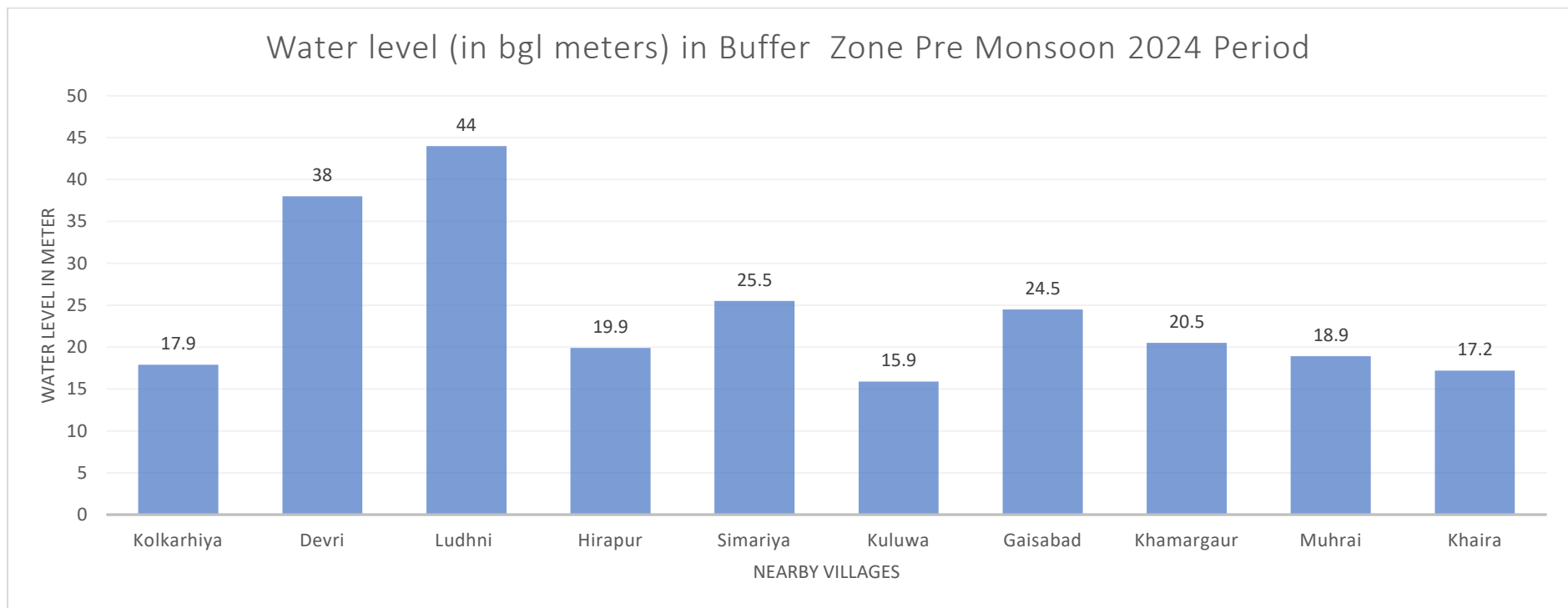
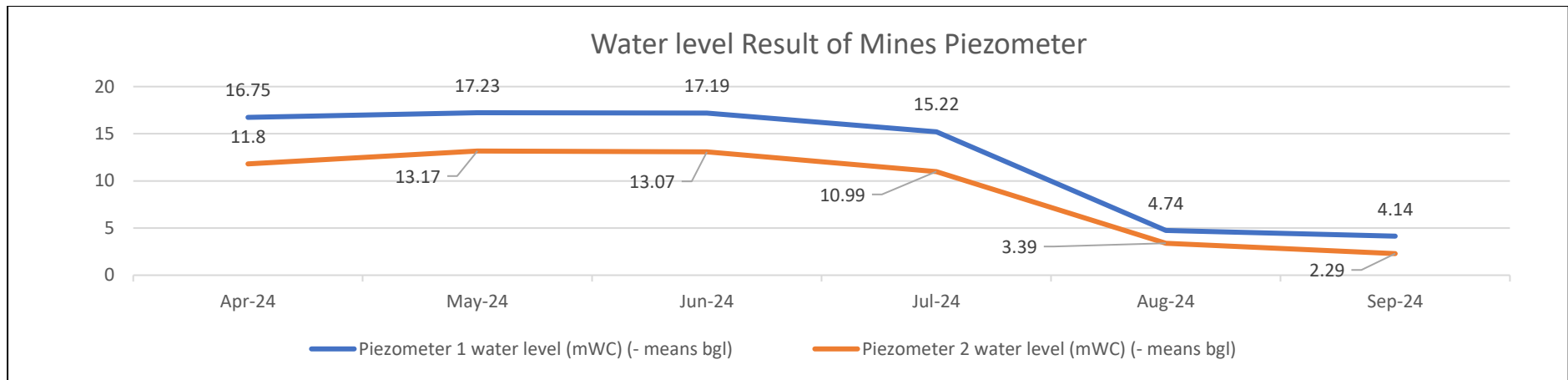
## ANNEXURE-7

Kolkarhiya Mine Piezometer-1 Monthly Average Water Level Results (With Telemetry)		
<b>DATALOGGER ID SPRINGWAY01 with Telemetry</b>  Website: <a href="http://35.200.247.132/webdata/webdatalogin">http://35.200.247.132/webdata/webdatalogin</a>  User ID : springwaymin  Password: SpR3i9gwmi9_G	MONTH	WATER LEVEL (mWC) (- means bgl)
	Apr-24	16.75
	May-24	17.23
	Jun-24	17.19
	Jul-24	15.22
	Aug-24	4.74
	Sep-24	4.14

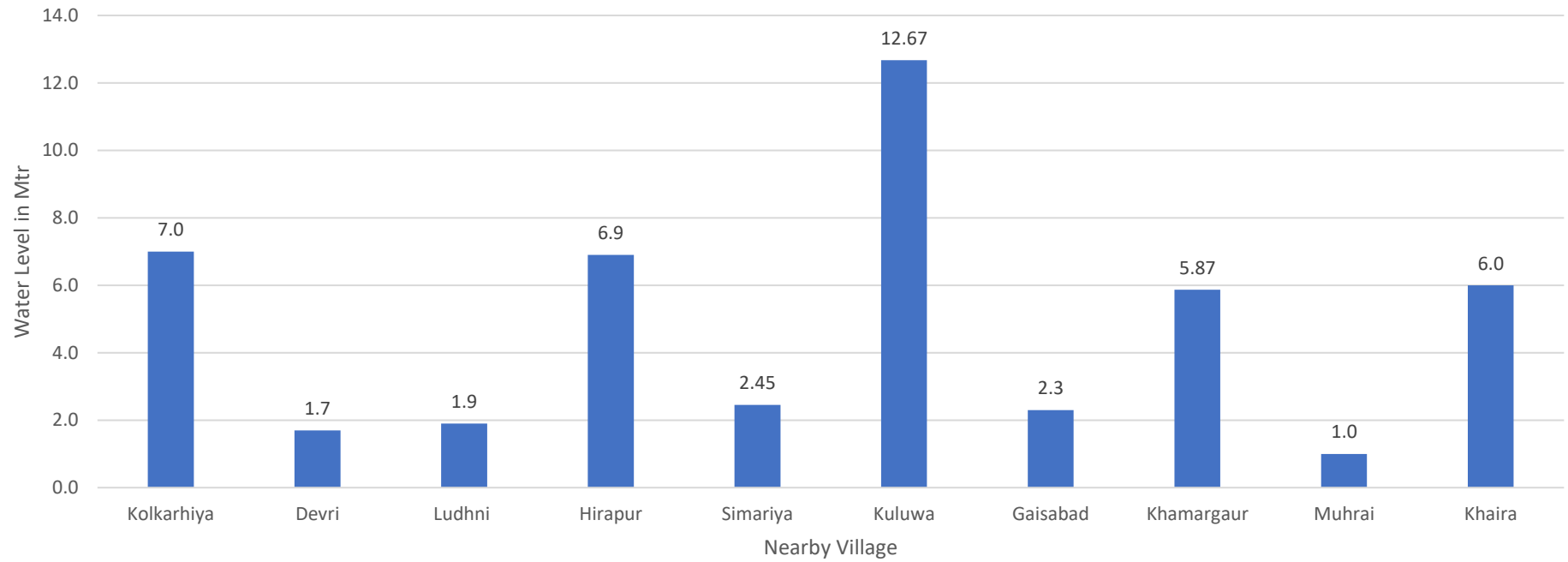
Kolkarhiya Mine Piezometer-2 Monthly Average Water Level Results (Without Telemetry)		
<b>DATALOGGER ID SPRINGWAY02 (Without Telemetry)</b>	MONTH	WATER LEVEL (mWC) (- means bgl)
	Apr-24	11.8
	May-24	13.17
	Jun-24	13.07
	Jul-24	10.99
	Aug-24	3.39
	Sep-24	2.29



Buffer Zone Ground Water Level Monitoring: Pre Monsoon 2024 to Monsoon 2024									
Sr. No.	Name of Village	Owner Name	Latitude	Longitude	Type of Monitoring Station	Direction from Mine	Aerial Distance (in Km)	Water level (in bgl meters)	
								May-2024	August-2024
1	Kolkarhiya	Shri Rajendar Parashar	24°16'23.93"N	79°49'24.247"E	Bore Well	Core-zone	-	17.9	7.0
2	Devri	Shri Sharda Patel	24°15'44.431"N	79°50'31.898"E	Bore Well	E	2.5	38	1.7
3	Ludhni	Shri Sanjay Tiwari	24°14'26.941"N	79°53'1.626"E	Bore Well	E	7.5	44	1.9
4	Hirapur	Shri Monu Pathak	24°12'42.66"N	79°52'5.098"E	Bore Well	SE	8.5	19.9	6.9
5	Simariya	Govt Bus Stand	24°16'0.703"N	79°53'49.999"E	Bore Well	E	8	25.5	2.45
6	Kuluwa	Shri Dipendra Patel	24°16'1.018"N	79°50'49.372"E	Bore Well	NE	3	15.9	12.67
7	Gaisabad	Shri Rinku Shrivastav	24°14'12.779"N	79°49'30.482"E	Bore Well	S	4	24.5	2.3
8	Khamargaur	Govt Borewell on the Village road	24°18'28.728"N	79°49'25.982"E	Bore Well	N	4	20.5	5.87
9	Muhrai	Shri Ramadhin Patel	24°16'43.86"N	79°46'40.378"E	Bore Well	SW	4	18.9	1.0
10	Khaira	Govt School	24°18'47.426"N	79°47'37.251"E	Bore Well	WN	4	17.2	6.0



Water level (in bgl meters) in Buffer Zone Monsoon 2024 Period





**M/s Springway Mining Private Limited**  
**at Village Kolkarhiya, Tehsil Simariya Dist. Panna (M.P.)**  
**GROUND WATER ANALYSIS REPORT (May 2024, Pre Monsoon Period)**  
**FOR KOLKARHIYA LIMESTONE MINE**

Sr.No.	Test Parameters	Unit	Method No.	Requirement as per IS-10500-2012		Mine Site
				Desirable	Permissible	(Borewell)
1	pH Value at 25.°C	-	APHA 24th Ed.4500H+A+B	6.5-8.5	No relaxation	7.33
2	Temperature	°C	APHA 24th Ed. 2550-A+B	Not Specified	Not Specified	26.2
3	Colour	Hazen	APHA 24th Ed. 2120-B	5	15	<5.0
4	Turbidity	NTU	APHA 24th Ed. 2130-A+B	1	5	
5	Odour	-	APHA 24th Ed. 2150-B	Agreeable	Agreeable	Agreeable
6	Taste	-	APHA 24th Ed. 2160-B	Agreeable	Agreeable	Agreeable
7	Electrical Conductivity	µS/Cm	APHA 24th Ed. 2510 B	Not Specified	Not Specified	754
8	Alkalinity	mg/L	APHA 24th Ed. 2320-A+ B	200	600	212
9	Total Dissolved Solids	mg/L	APHA 24th Ed. 2540-C	500	2000	496
10	Total Hardness	mg/L	APHA 24th Ed. 2340 A+C	200	600	238
11	Calcium	mg/L	APHA 24th Ed. 3500 Ca- A+B	75	200	49.1
12	Magnesium	mg/L	APHA 24th Ed. 3500 Mg A+B	30	100	28.6
13	Sodium	mg/L	APHA 24th Ed. 3500 Na, A+B	-	-	22
14	Phosphate	mg/L	APHA 24th Ed. 4500-E	-	-	<0.20
15	Sulfate	mg/L	APHA 24th Ed. 4500-SO42- E	200	400	26.4
16	Free Residual Chlorine	mg/L	APHA 24th Ed. 4500-Cl B	0.2	1.00	<0.20
17	Chloride	mg/L	APHA 24th Ed. 4500 Cl A+B	250	1000	32
18	Potassium	mg/L	APHA 24th Ed. 3500 K, A+B	-	-	10
19	Nitrate	mg/L	APHA 24th Ed. 4500-NO3- B	45	No relaxation	7.2
20	Phenolic Compound	mg/L	APHA ED-5530 C	0.001	0.002	BDL
<b>Heavy Metals</b>						
21	Boron	mg/L	APHA 24th Ed. 4500 B A+C	0.5	1.00	<0.2
22	Copper	mg/L	APHA 24th Ed. 3111 A+B	0.05	1.5	<0.05
23	Cadmium	mg/L	APHA 24th Ed. 3111 A+B	0.003	No relaxation	BDL
24	Iron	mg/L	APHA 24th Ed. 3500 Fe B	0.3	No relaxation	0.25
25	Lead	mg/L	APHA 24th Ed. 3111 A+B	0.01	No relaxation	<0.01
26	Nickel	mg/L	APHA 24th Ed. 3111 A+B	0.02	No relaxation	<0.02
27	Zinc	mg/L	APHA 24th Ed. 3111 A+B	5	15	<0.02
28	Mercury	mg/L	APHA 24th Ed. 3112 A+B	0.001	No relaxation	BDL
29	Total Chromium	mg/L	APHA 24th Ed. 3111 A+B	0.05	No relaxation	BDL
30	Arsenic	mg/L	APHA 24th Ed. 3114 B	0.01	0.05	BDL
31	Fluoride	mg/L	APHA 24th Ed. 4500-C	1	1.5	0.28
32	Manganese	mg/L	APHA, 24rd Ed., 3111 A+B	0.1	0.3	BDL
33	Aluminium	mg/L	APHA 24th Ed. 3500-AL+B	0.03	0.2	BDL
34	Sulphide	mg/L	APHA 24th Ed. 4500-(S2)-D	0.05	No relaxation	BDL
35	Selenium	mg/L	APHA 24th Ed. 3114 B	0.01	No relaxation	BDL
36	Mineral Oil	mg/L	APHA, 24rd Ed. (Part 39) Class -6 Infrared Partition Method	0.5	No relaxation	BDL
37	Anionic Detergent	mg/L	APHA 24rd Ed., 5540 A+C	0.2	1	BDL
38	Cyanide	mg/L	APHA 24th Ed. ,4500 CN	0.05	No relaxation	BDL
39	Silver	mg/L	APHA 24th Ed. -3500 AG	0.1	No relaxation	BDL
40	Barium	mg/L	APHA 24th Ed. 3500 BA	0.7	No relaxation	BDL
41	Chloramines	mg/L	APHA 4500-Cl G	4	No relaxation	BDL
42	Molybdenum	mg/L	APHA 24th Ed. 3500,MO	0.07	No relaxation	BDL
<b>Pesticide</b>						
43	Aldrin	µg/l	USEPA 508	0.03	-	ND
44	2,4-Dichlorophenoxy acetic acid	µg/l	USEPA 515.1	30	-	ND
45	DDT	µg/l	USEPA 508	1	-	ND
46	Endosulfan	µg/l	USEPA 508	0.4	-	ND
47	Malathion	µg/l	USEPA 8141A	190	-	ND
<b>Biological</b>						
48	Total Coliform Count	MPN/100 ML	APHA 24th Ed. 9221 B	Shall not be detectable in any 100 ml sample		0
49	E-Coli	MPN/100 ML	APHA 24th Ed. 9221 G			0

**GROUND WATER ANALYSIS REPORT (May 2024, Pre Monsoon Period) FOR KOLKARHIYA LIMESTONE MINE (CORE AND BUFFER ZONE)**

GROUND WATER ANALYSIS REPORT (May 2024, Pre Monsoon Period) FOR KOLKARHIYA LIMESTONE MINE (CORE AND BUFFER ZONE)														
	Test Parameters	Unit	Method No.	Requirement as per IS-10500-2012		Name of Village								
				Acceptable	Permissible	Village Kolkariya (Hand Pump)	Village Simariya (Hand Pump)	Village Amghat (Hand Pump)	Village Hirapur (Hand Pump)	Village Gaisabad (Hand Pump)	Village Muhrai (Hand Pump)	Village Maharajganj (Hand Pump)	Village Devri (Hand Pump)	Village Khaira-Khairi (Hand pump)
1	pH Value at 25.°C	-	APHA 24th Ed.4500H+A+B	6.5-8.5	No relaxation	7.56	7.52	7.25	7.58	7.44	7.62	7.22	7.45	7.54
2	Temperature	°C	APHA 24th Ed. 2550-A+B	Not Specified	Not Specified	25.8	26	25.9	25.9	27.1	25.9	25.9	26.8	25.8
3	Colour	Hazen	APHA 24th Ed. 2120-B	5	15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4	Turbidity	NTU	APHA 24th Ed. 2130-A+B	1	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
5	Odour	-	APHA 24th Ed. 2150-B	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
6	Electrical Conductivity	µS/Cm	APHA 24th Ed. 2510 B	Not Specified	Not Specified	681	744	690	790	642	824	730	782	711
7	Alkalinity	mg/L	APHA 24th Ed. 2320-A+ B	200	600	180	188	186	192	164	214	182	204	178
8	Total Dissolved Solids	mg/L	APHA 24th Ed. 2540-C	500	2000	439	496	428	507	409	526	453	485	455
9	Total Hardness	mg/L	APHA 24th Ed. 2340 A+C	200	600	168	214	172	204	178	234	176	224	192
10	Calcium	mg/L	APHA 24th Ed. 3500 Ca- A+B	75	200	32.5	38.5	36.5	40.7	32.8	45.2	32.4	44.1	34.2
11	Magnesium	mg/L	APHA 24th Ed. 3500 Mg A+B	30	100	21.1	28.6	19.7	24.8	23.4	29.4	23.1	27.7	25.9
12	Sodium	mg/L	APHA 24th Ed. 3500 Na, A+B	-	-	19	24	20	25	22	25	28	26	20
13	Phosphate	mg/L	APHA 24th Ed. 4500-E	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
14	Sulfate	mg/L	APHA 24th Ed. 4500-SO42-E	200	400	25.1	28.1	22.1	28.9	28.7	30.9	24.6	27.4	24.8
15	Potassium	mg/L	APHA 24th Ed. 3500 K, A+B	-	-	8	11	11	12	11	12	12	12	9
16	Nitrate	mg/L	APHA 24th Ed. 4500-NO3- B	45	No relaxation	6.7	6.3	5.9	8.9	8.2	6.2	7.8	6.5	5.4
17	Free Residual Chlorine	mg/L	APHA 24th Ed. 4500-Cl B	0.2	1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
18	Chloride	mg/L	APHA 24th Ed. 4500 Cl A+B	250	1000	30	42	28	38	42	38.4	36.8	30	36
19	Boron	mg/L	APHA 24th Ed. 4500 B A+C	0.5	1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
20	Copper	mg/L	APHA 24th Ed. 3111 A+B	0.05	1.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
21	Cadmium	mg/L	APHA 24th Ed. 3111 A+B	0.003	No relaxation	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
22	Iron	mg/L	APHA 24th Ed. 3500 Fe B	0.3	No relaxation	0.22	0.28	0.22	0.27	0.29	0.28	0.22	0.29	0.22
23	Lead	mg/L	APHA 24th Ed. 3111 A+B	0.01	No relaxation	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
24	Nickel	mg/L	APHA 24th Ed. 3111 A+B	0.02	No relaxation	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
25	Zinc	mg/L	APHA 24th Ed. 3111 A+B	5	15	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
26	Mercury	mg/L	APHA 24th Ed. 3112 A+B	0.001	No relaxation	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
27	Total Chromium	mg/L	APHA 24th Ed. 3111 A+B	0.05	No relaxation	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
28	Arsenic	mg/L	APHA 24th Ed. 3114 B	0.01	0.05	BDL								

**M/s Springway Mining Private Limited**  
at Village Kolkarhiya, Tehsil Simariya Dist. Panna (M.P.)

Surface water analysis report (**May 2024, Pre-Monsoon Period**) for kolkarhiya limestone mine

S. No.	Test Parameters	Unit	Method of Test	Limit as per IS:2296	Result Obtained	
				Class A	Bearma River	Sonar River
1	pH	-	APHA 4500-H+	6.0-9.0	7.22	7.63
2	Colour	Hazen	APHA 2120-B	300	10	15
3	Turbidity	NTU	APHA 2130-A+B	-	<1.0	<1.0
4	Total Dissolved Solid (TDS)	mg/L	APHA 2540-C	1500	425	395
5	Total Suspended Solid (TSS)	mg/L	APHA (2540-D)	100	25.6	18.1
6	Alkalinity	mg/L	APHA 2320-A+ B	-	188	175
7	Total Hardness	mg/L	APHA 2340 A+C	-	172	158
8	Dissolve Oxygen (DO)	mg/L	APHA 4500:(O)-C	4 (Min.)	6.1	5.9
9	Biological Oxygen Demand (BOD 3 days 27°C)	mg/L	IS: 3025 (Part-44)	3	2.8	2.2
10	Chemical Oxygen Demand as COD	mg/L	APHA (5220-B)	250	16	12
11	Chloride, Cl	mg/L	APHA 4500:(Cl <sup>-</sup> )-B	600	38	36
12	Fluoride, (F)	mg/L	APHA 4500:(F <sup>-</sup> )-D	1.5	0.59	0.52
13	Sulphate, SO <sub>4</sub>	mg/L	APHA 4500:(SO <sub>4</sub> )-E	400	38.50	32.1
14	Phenolic Compound, (C <sub>6</sub> H <sub>5</sub> OH)	mg/L	APHA 5530-C	0.005	<0.01	<0.01
15	Oil & Grease, ( O & G)	mg/L	APHA 5520-D	0.1	BDL	BDL
16	Nitrate, (NO <sub>3</sub> )	mg/L	APHA 4500:(NO <sub>3</sub> <sup>-</sup> )-B	50	5.9	6.2
17	Arsenic, (As)	mg/L	APHA 3120B	0.2	<0.01	<0.01
18	Copper, (Cu)	mg/L	APHA 3120B	1.5	<0.01	<0.01
19	Iron, (Fe)	mg/L	APHA 3120B	0.5	0.23	0.25
20	Zinc, (Zn)	mg/L	APHA 3120B	15	<0.05	<0.05
21	Cadmium, Cd)	mg/L	APHA 3120B	0.01	<0.01	<0.01
22	Chromium, (Cr+6)	mg/L	APHA 3500:(Cr)-B	0.05	<0.01	<0.01
23	Lead, (Pb)	mg/L	APHA-3120B	0.1	<0.01	<0.01
24	Mercury (HG)	mg/L	APHA-3112A+B	-	<0.01	<0.01
25	Total Coliform Count	MPN/100 ml	APHA 9221 B	5000	210	350
26	Faecal Coliform	MPN/100 ml	APHA 9221 E	-	120	220



**M/s Springway Mining Private Limited**  
at Village Kolkarhiya, Tehsil Simariya Dist. Panna (M.P.)

QUARTERLY SURFACE WATER FLOW RATE MONITORING REPORT OF KOLKARHIYA LIMESTONE MINE BUFFER ZONE						
Sr.No.	Location	Parameters	Unit	Results		
				Apr-24	May-24	Jun-24
1	Sonar River upstream	Flow rate	m <sup>3</sup> /sec	210.32	225.2	218.7
2	Sonar River downstream			193.25	199.32	198.4
3	Bearma River upstream			278.65	271.3	268.7
4	Bearma River downstream			255.84	248.32	249.5
5	Seasonal Nallah Gahra			Dry	Dry	Dry
6	Seasonal Nallah Marwa			Dry	Dry	Dry

**M/s JSW Cement Limited**  
**at Village Kolkarihiya, Tehsil Simariya Dist. Panna (M.P.)**  
**GROUND WATER ANALYSIS REPORT (August 2024, Monsoon Period)**  
**FOR KOLKARIHIYA LIMESTONE MINE**

Sr.No.	Test Parameters	Unit	Method No.	Requirement as per IS-10500-2012		Mine Office (Borewell)
				Desirable	Permissible	
1	pH Value at 25°C	-	APHA 24th Ed.4500H+A+B	6.5-8.5	No relaxation	7.22
2	Temperature	°C	APHA 24th Ed. 2550-A+B	Not Specified	Not Specified	21.1
3	Colour	Hazen	APHA 24th Ed. 2120-B	5	15	<5.0
4	Turbidity	NTU	APHA 24th Ed. 2130-A+B	1	5	<1.0
5	Odour	-	APHA 24th Ed. 2150-B	Agreeable	Agreeable	Agreeable
6	Taste	-	APHA 24th Ed. 2160-B	Agreeable	Agreeable	Agreeable
7	Electrical Conductivity	µS/Cm	APHA 24th Ed. 2510 B	Not Specified	Not Specified	1560
8	Alkalinity	mg/L	APHA 24th Ed. 2320-A+ B	200	600	250
9	Total Dissolved Solids	mg/L	APHA 24th Ed. 2540-C	500	2000	988
10	Total Hardness	mg/L	APHA 24th Ed. 2340 A+C	200	600	520
11	Calcium	mg/L	APHA 24th Ed. 3500 Ca- A+B	75	200	125.5
12	Magnesium	mg/L	APHA 24th Ed. 3500 Mg A+B	30	100	95
13	Sodium	mg/L	APHA 24th Ed. 3500 Na, A+B	-	-	35
14	Phosphate	mg/L	APHA 24th Ed. 4500-E	-	-	<0.20
15	Sulfate	mg/L	APHA 24th Ed. 4500-SO42- E	200	400	37.8
16	Free Residual Chlorine	mg/L	APHA 24th Ed. 4500-Cl B	0.2	1.00	<0.20
17	Chloride	mg/L	APHA 24th Ed. 4500 Cl A+B	250	1000	82.3
18	Potassium	mg/L	APHA 24th Ed. 3500 K, A+B	-	-	18
19	Nitrate	mg/L	APHA 24th Ed. 4500-NO3- B	45	No relaxation	8.4
20	Phenolic Compound	mg/L	APHA ED-5530 C	0.001	0.002	BDL
<b>Heavy Metals</b>						
21	Boron	mg/L	APHA 24th Ed. 4500 B A+C	0.5	1.00	<0.2
22	Copper	mg/L	APHA 24th Ed. 3111 A+B	0.05	1.5	<0.05
23	Cadmium	mg/L	APHA 24th Ed. 3111 A+B	0.003	No relaxation	BDL
24	Iron	mg/L	APHA 24th Ed. 3500 Fe B	0.3	No relaxation	0.29
25	Lead	mg/L	APHA 24th Ed. 3111 A+B	0.01	No relaxation	<0.01
26	Nickel	mg/L	APHA 24th Ed. 3111 A+B	0.02	No relaxation	<0.02
27	Zinc	mg/L	APHA 24th Ed. 3111 A+B	5	15	<0.02
28	Mercury	mg/L	APHA 24th Ed. 3112 A+B	0.001	No relaxation	BDL
29	Total Chromium	mg/L	APHA 24th Ed. 3111 A+B	0.05	No relaxation	BDL
30	Arsenic	mg/L	APHA 24th Ed. 3114 B	0.01	0.05	BDL
31	Fluoride	mg/L	APHA 24th Ed. 4500-C	1	1.5	0.88
32	Manganese	mg/L	APHA, 24rd Ed., 3111 A+B	0.1	0.3	BDL
33	Aluminium	mg/L	APHA 24th Ed. 3500-AL+B	0.03	0.2	BDL
34	Sulphide	mg/L	APHA 24th Ed. 4500-(S2)-D	0.05	No relaxation	BDL
35	Selenium	mg/L	APHA 24th Ed. 3114 B	0.01	No relaxation	BDL
36	Mineral Oil	mg/L	APHA, 24rd Ed. (Part 39) Class -6 Infrared Partition Method	0.5	No relaxation	BDL
37	Anionic Detergent	mg/L	APHA 24rd Ed., 5540 A+C	0.2	1	BDL
38	Cyanide	mg/L	APHA 24th Ed. ,4500 CN	0.05	No relaxation	BDL
39	Silver	mg/L	APHA 24th Ed. -3500 AG	0.1	No relaxation	BDL
40	Barium	mg/L	APHA 24th Ed. 3500 BA	0.7	No relaxation	BDL
41	Chloramines	mg/L	APHA 4500-Cl G	4	No relaxation	BDL
42	Molybdenum	mg/L	APHA 24th Ed. 3500,MO	0.07	No relaxation	BDL
<b>Pesticide</b>						
43	Aldrin	µg/l	USEPA 508	0.03	-	ND
44	2,4-Dichlorophenoxy acetic acid	µg/l	USEPA 515.1	30	-	ND
45	DDT	µg/l	USEPA 508	1	-	ND
46	Endosulfan	µg/l	USEPA 508	0.4	-	ND
47	Malathion	µg/l	USEPA 8141A	190	-	ND
<b>Biological</b>						
48	Total Coliform Count	MPN/100 ML	APHA 24th Ed. 9221 B	Shall not be detectable in any 100 ml sample		0
49	E-Coli	MPN/100 ML	APHA 24th Ed. 9221 G			0

	Test Parameters	Unit	Method No.	Requirement as per IS-10500-2012		Name of Village									
				Acceptable	Permissible	Village Kolkariya	Village Simariya	Village Amghat	Village Hirapur	Village Gaisabad	Village Muhrai	Village Maharaiganj	Village Devri	Village Khaira-Khairi	Mine Office
						(Hand Pump)	(Hand Pump)	(Hand Pump)	(Hand Pump)	(Hand Pump)	(Hand Pump)	(Hand Pump)	(Hand Pump)	(Hand Pump)	(Hand Pump)
1	pH Value at 25.°C	-	APHA 24th Ed.4500H+A+B	6.5-8.5	No relaxation	7.15	7.67	7.17	7.13	7.2	7.69	7.29	7.61	7.74	7.22
2	Temperature	°C	APHA 24th Ed. 2550-A+B	Not Specified	Not Specified	28.3	28.5	21.4	20.9	20.1	24.4	24.1	24.2	24.9	21.1
3	Colour	Hazen	APHA 24th Ed. 2120-B	5	15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.1
4	Turbidity	NTU	APHA 24th Ed. 2130-A+B	1	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1
5	Odour	-	APHA 24th Ed. 2150-B	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
6	Electrical Conductivity	µS/Cm	APHA 24th Ed. 2510 B	Not Specified	Not Specified	756	764	695	1157	1427	865	711	787	732	1560
7	Alkalinity	mg/L	APHA 24th Ed. 2320-A+ B	200	600	195	216	272	276	300	224	172	208	188	250
8	Total Dissolved Solids	mg/L	APHA 24th Ed. 2540-C	500	2000	459	504	1236	743	422	538	434	456	467	988
9	Total Hardness	mg/L	APHA 24th Ed. 2340 A+C	200	600	168	232	284	300	568	240	158	224	204	520
10	Calcium	mg/L	APHA 24th Ed. 3500 Ca- A+B	75	200	45.5	48.7	80	57.71	121.8	48.4	30.1	48.1	38.2	125.5
11	Magnesium	mg/L	APHA 24th Ed. 3500 Mg A+B	30	100	29.7	26.8	25	42.5	48.5	29	20.1	25.3	24.4	95
12	Sodium	mg/L	APHA 24th Ed. 3500 Na, A+B	-	-	20	28.4	64	28	34	24	25	28	22	35
13	Phosphate	mg/L	APHA 24th Ed. 4500-E	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
14	Sulfate	mg/L	APHA 24th Ed. 4500-SO42-E	200	400	22.4	24.7	33.8	29.5	33.2	32.4	26.4	26.4	21.9	37.8
15	Potassium	mg/L	APHA 24th Ed. 3500 K, A+B	-	-	8	10	14	12	10	11	9	13	10	18
16	Nitrate	mg/L	APHA 24th Ed. 4500-NO3- B	45	No relaxation	5.5	7.2	8.2	8.4	8.9	7.1	8.2	6.9	6.5	8.4
17	Free Residual Chlorine	mg/L	APHA 24th Ed. 4500-Cl B	0.2	1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
18	Chloride	mg/L	APHA 24th Ed. 4500 Cl A+B	250	1000	27	38	59.9	99	48	32.4	38	32	42	82.3
19	Boron	mg/L	APHA 24th Ed. 4500 B A+C	0.5	1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
20	Copper	mg/L	APHA 24th Ed. 3111 A+B	0.05	1.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
21	Cadmium	mg/L	APHA 24th Ed. 3111 A+B	0.003	No relaxation	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
22	Iron	mg/L	APHA 24th Ed. 3500 Fe B	0.3	No relaxation	0.23	0.24	0.24	0.27	0.17	0.24	0.21	0.24	0.29	0.29
23	Lead	mg/L	APHA 24th Ed. 3111 A+B	0.01	No relaxation	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
24	Nickel	mg/L	APHA 24th Ed. 3111 A+B	0.02	No relaxation	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
25	Zinc	mg/L	APHA 24th Ed. 3111 A+B	5	15	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
26	Mercury	mg/L	APHA 24th Ed. 3112 A+B	0.001	No relaxation	BDL	BDL	BDL							



**M/s JSW Cement Limited**  
at Village Kolkarhiya, Tehsil Simariya Dist. Panna (M.P.)

Surface water analysis report (**August 2024, Monsoon Period**) for kolkarhiya limestone mine

S. No.	Test Parameters	Unit	Method of Test	Limit as per IS:2296	Result Obtained	
				Class A	Bearma River	Sonar River
1	pH	-	APHA 4500-H+	6.0-9.0	7.84	7.48
2	Colour	Hazen	APHA 2120-B	300	20	12
3	Turbidity	NTU	APHA 2130-A+B	-	<1.0	<1.0
4	Total Dissolved Solid (TDS)	mg/L	APHA 2540-C	1500	520	468
5	Total Suspended Solid (TSS)	mg/L	APHA (2540-D)	100	28.4	23.5
6	Alkalinity	mg/L	APHA 2320-A+ B	-	205	235
7	Total Hardness	mg/L	APHA 2340 A+C	-	231	168
8	Dissolve Oxygen (DO)	mg/L	APHA 4500:(O)-C	4 (Min.)	6.2	6.8
9	Biological Oxygen Demand (BOD 3 days 27°C)	mg/L	IS: 3025 (Part-44)	3	2.9	2.4
10	Chemical Oxygen Demand as COD	mg/L	APHA (5220-B)	250	64	65
11	Chloride, Cl	mg/L	APHA 4500:(Cl <sup>-</sup> )-B	600	49	53
12	Fluoride, (F)	mg/L	APHA 4500:(F <sup>-</sup> )-D	1.5	0.36	0.36
13	Sulphate, SO <sub>4</sub>	mg/L	APHA 4500:(SO <sub>4</sub> )-E	400	32.40	31.5
14	Phenolic Compound, (C <sub>6</sub> H <sub>5</sub> OH)	mg/L	APHA 5530-C	0.005	<0.01	<0.01
15	Oil & Grease, ( O & G)	mg/L	APHA 5520-D	0.1	BDL	BDL
16	Nitrate, (NO <sub>3</sub> )	mg/L	APHA 4500:(NO <sub>3</sub> <sup>-</sup> )-B	50	10.6	9.4
17	Arsenic, (As)	mg/L	APHA 3120B	0.2	<0.01	<0.01
18	Copper, (Cu)	mg/L	APHA 3120B	1.5	<0.01	<0.01
19	Iron, (Fe)	mg/L	APHA 3120B	0.5	0.42	0.32
20	Zinc, (Zn)	mg/L	APHA 3120B	15	<0.05	<0.05
21	Cadmium, Cd)	mg/L	APHA 3120B	0.01	<0.01	<0.01
22	Chromium, (Cr+6)	mg/L	APHA 3500:(Cr)-B	0.05	<0.01	<0.01
23	Lead, (Pb)	mg/L	APHA-3120B	0.1	<0.01	<0.01
24	Mercury (HG)	mg/L	APHA-3112A+B	-	<0.01	<0.01
25	Total Coliform Count	MPN/100 ml	APHA 9221 B	5000	1110	750
26	Faecal Coliform	MPN/100 ml	APHA 9221 E	-	380	420

**M/s JSW Cement Limited**

at Village Kolkarhiya, Tehsil Simariya Dist. Panna (M.P.)

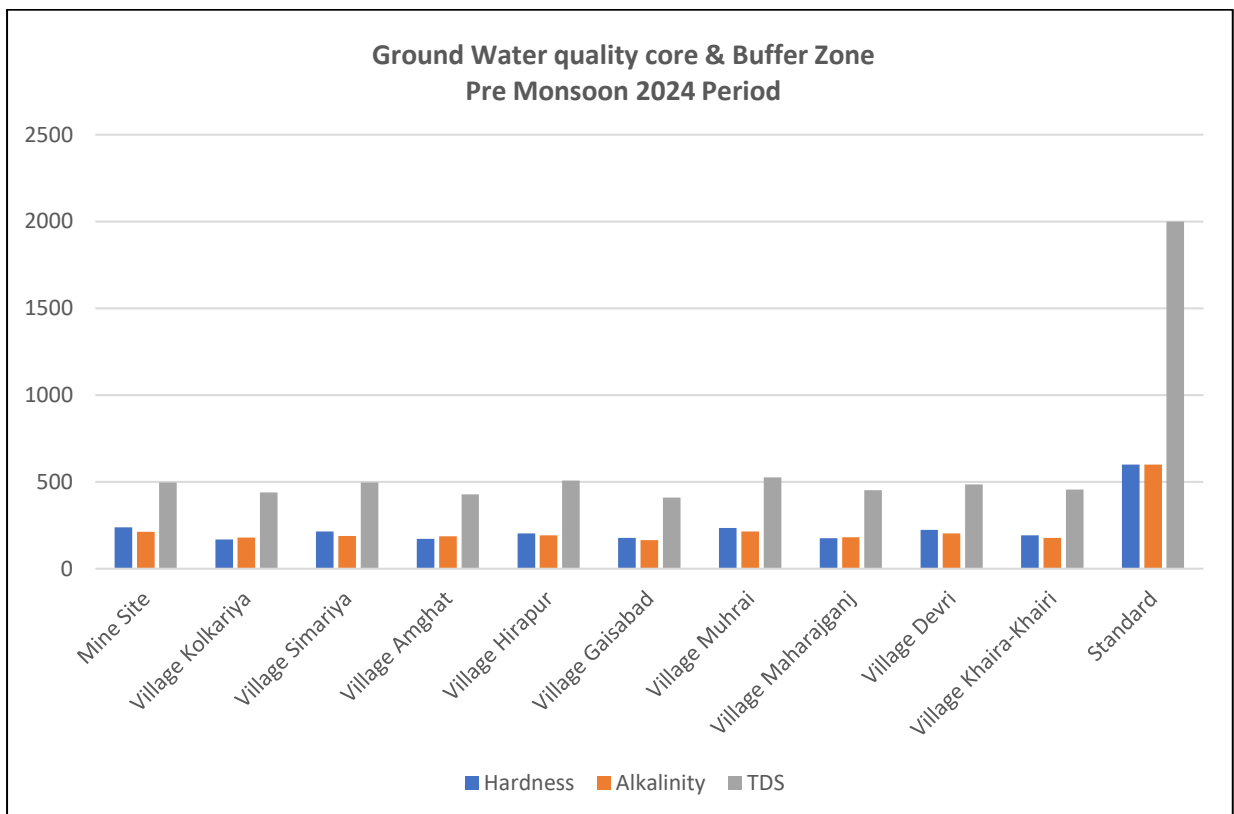
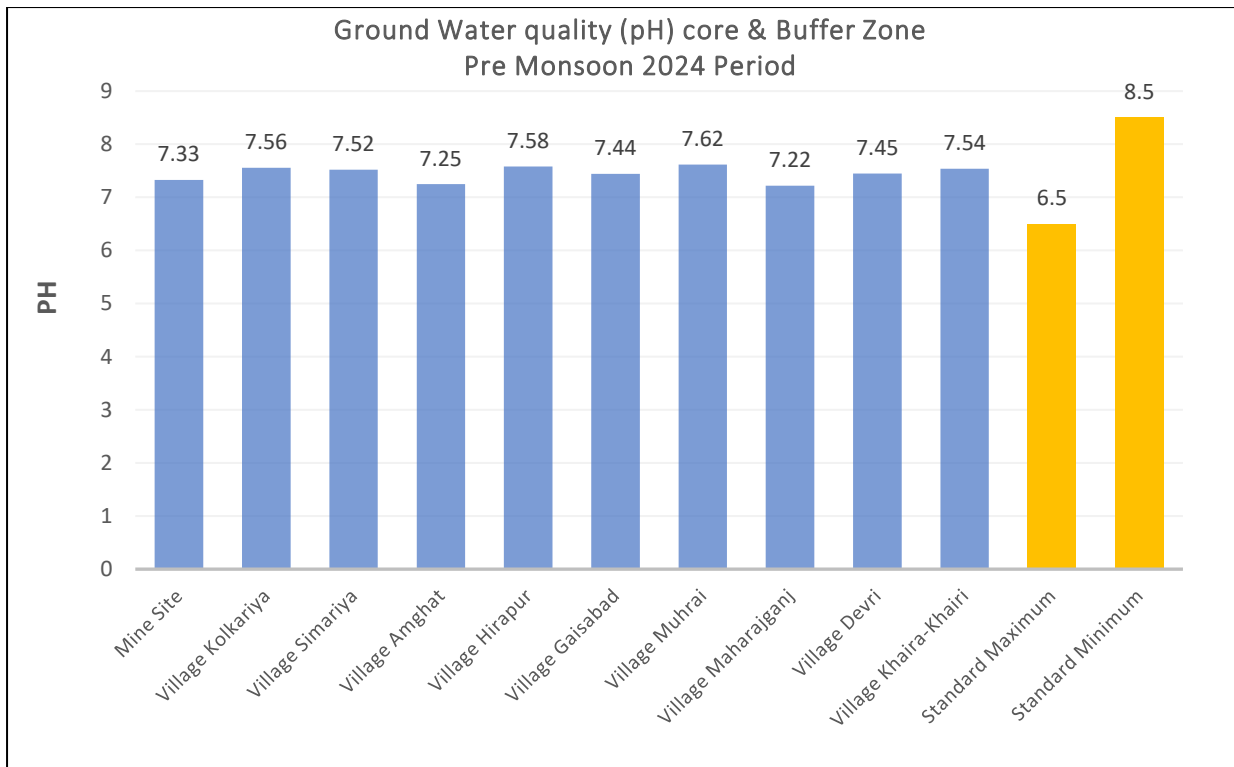
Surface water (Seasonal Nallah) analysis report (August 2024, Monsoon Period) for kolkarhiya limestone mine

S. No.	Test Parameters	Unit	Method of Test	Limit as per IS:2296	Result Obtained	
				Class A	Marwa Nallah	Gehra Nallah
1	pH	-	APHA 4500-H+	6.0-9.0	7.23	7.45
2	Colour	Hazen	APHA 2120-B	300	26	16
3	Turbidity	NTU	APHA 2130-A+B	-	<1.0	<1.0
4	Total Dissolved Solid (TDS)	mg/L	APHA 2540-C	1500	563	567
5	Total Suspended Solid (TSS)	mg/L	APHA (2540-D)	100	29.4	26.4
6	Alkalinity	mg/L	APHA 2320-A+ B	-	295	220
7	Total Hardness	mg/L	APHA 2340 A+C	-	361	145
8	Dissolve Oxygen (DO)	mg/L	APHA 4500:(O)-C	4 (Min.)	6.4	5.6
9	Biological Oxygen Demand (BOD 3 days 27°C)	mg/L	IS: 3025 (Part-44)	3	3.6	3.2
10	Chemical Oxygen Demand as COD	mg/L	APHA (5220-B)	250	88	64
11	Chloride, Cl	mg/L	APHA 4500:(Cl)-B	600	126	46
12	Fluoride, (F)	mg/L	APHA 4500:(F)-D	1.5	0.68	0.32
13	Sulphate, SO <sub>4</sub>	mg/L	APHA 4500:(SO <sub>4</sub> )-E	400	39.50	35.3
14	Phenolic Compound, (C <sub>6</sub> H <sub>5</sub> OH)	mg/L	APHA 5530-C	0.005	<0.01	<0.01
15	Oil & Grease, ( O & G)	mg/L	APHA 5520-D	0.1	BDL	BDL
16	Nitrate, (NO <sub>3</sub> )	mg/L	APHA 4500:(NO <sub>3</sub> )-B	50	11.5	9.3
17	Arsenic, (As)	mg/L	APHA 3120B	0.2	<0.01	<0.01
18	Copper, (Cu)	mg/L	APHA 3120B	1.5	<0.01	<0.01
19	Iron, (Fe)	mg/L	APHA 3120B	0.5	0.38	0.38
20	Zinc, (Zn)	mg/L	APHA 3120B	15	<0.05	<0.05
21	Cadmium, Cd)	mg/L	APHA 3120B	0.01	<0.01	<0.01
22	Chromium, (Cr+6)	mg/L	APHA 3500:(Cr)-B	0.05	<0.01	<0.01
23	Lead, (Pb)	mg/L	APHA-3120B	0.1	<0.01	<0.01
24	Mercury (HG)	mg/L	APHA-3112A+B	-	<0.01	<0.01
25	Total Coliform Count	MPN/100 ml	APHA 9221 B	5000	1600	920
26	Faecal Coliform	MPN/100 ml	APHA 9221 E	-	920	560

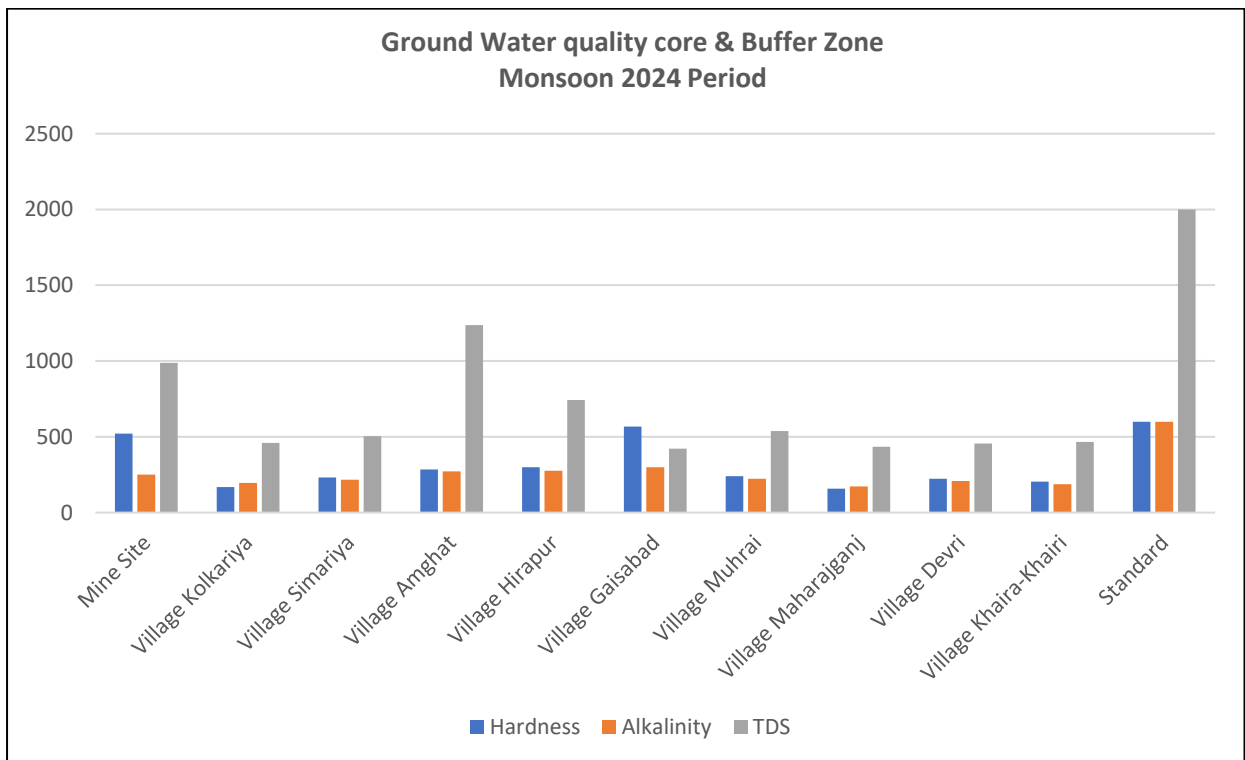
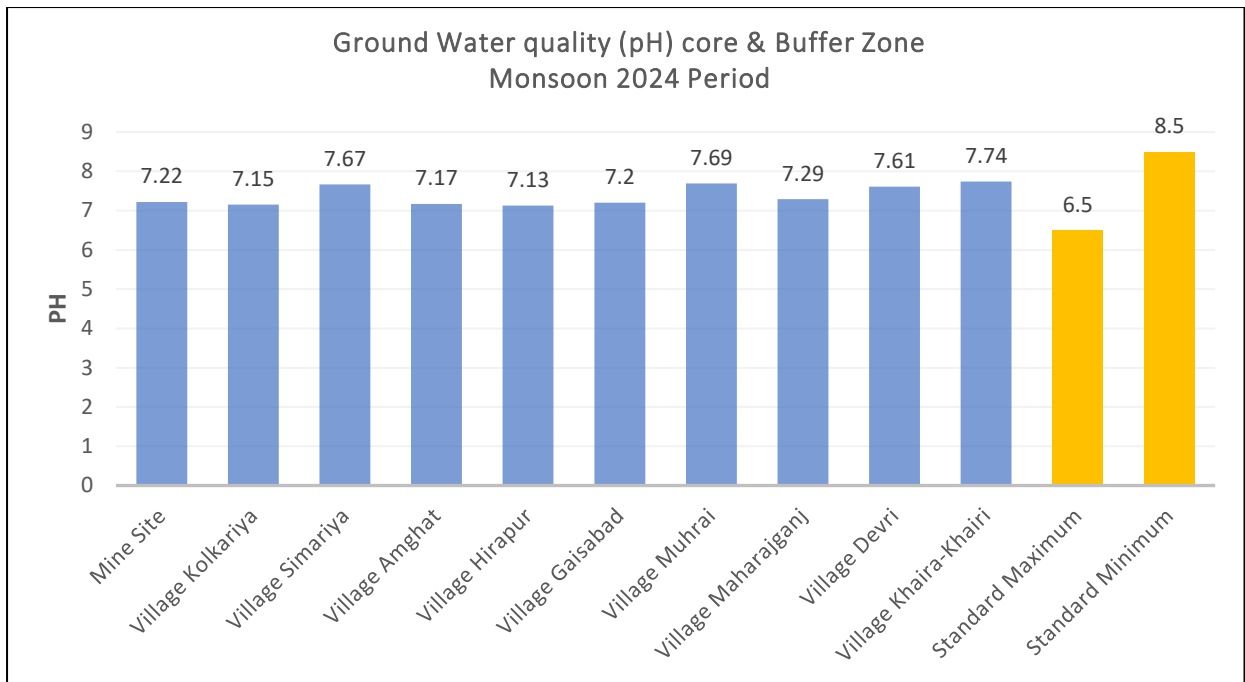
**M/s Springway Mining Private Limited**  
at Village Kolkarhiya, Tehsil Simariya Dist. Panna (M.P.)

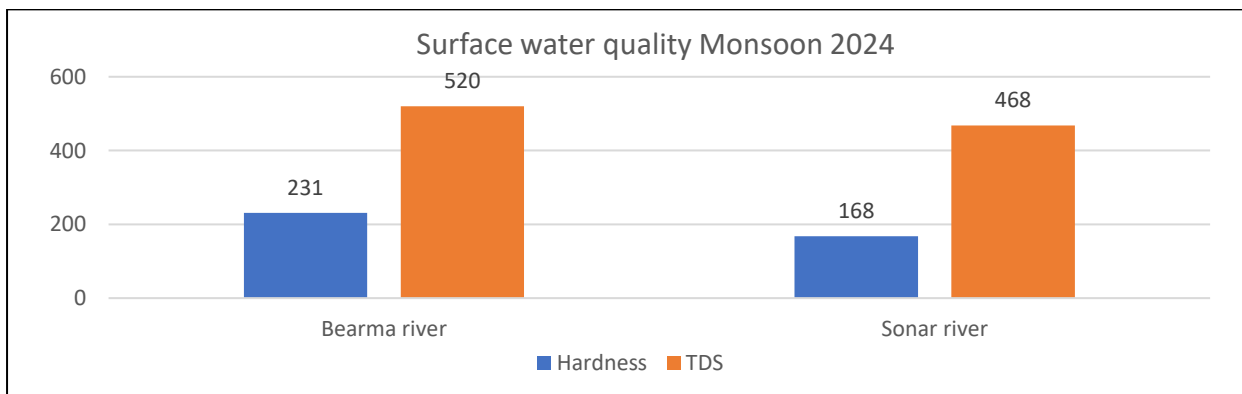
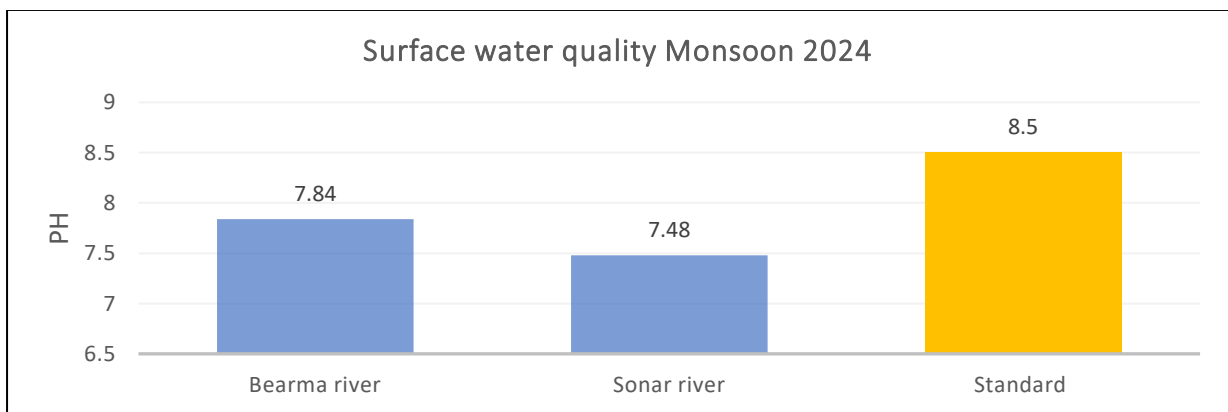
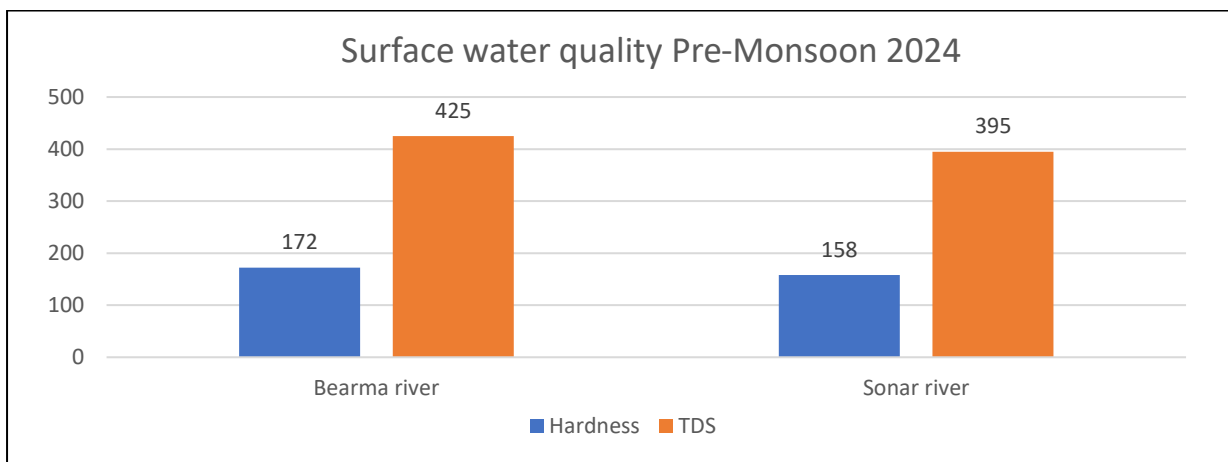
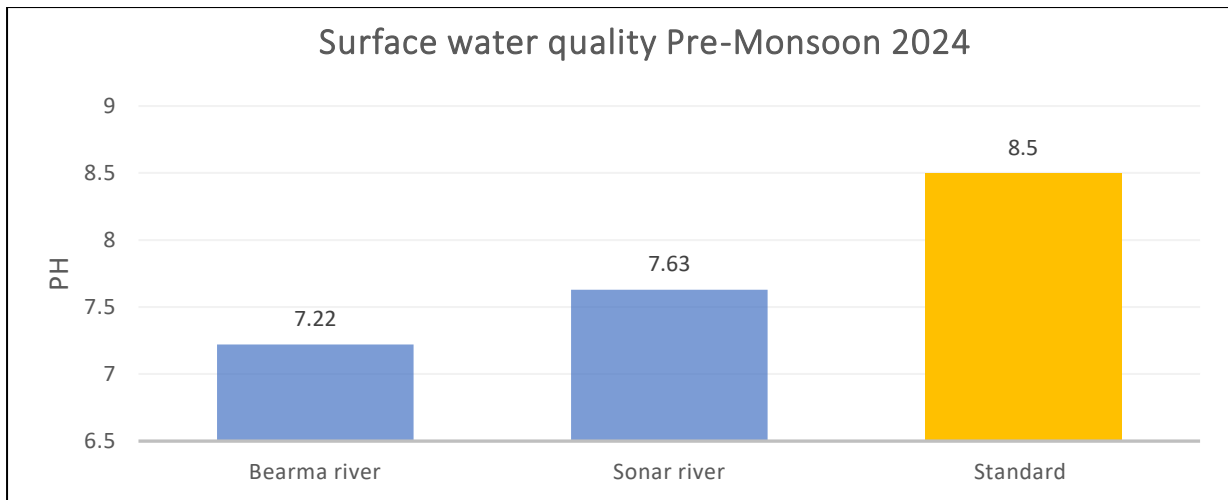
**QUARTERLY SURFACE WATER FLOW RATE MONITORING REPORT OF KOLKARHIYA LIMESTONE MINE BUFFER ZONE**

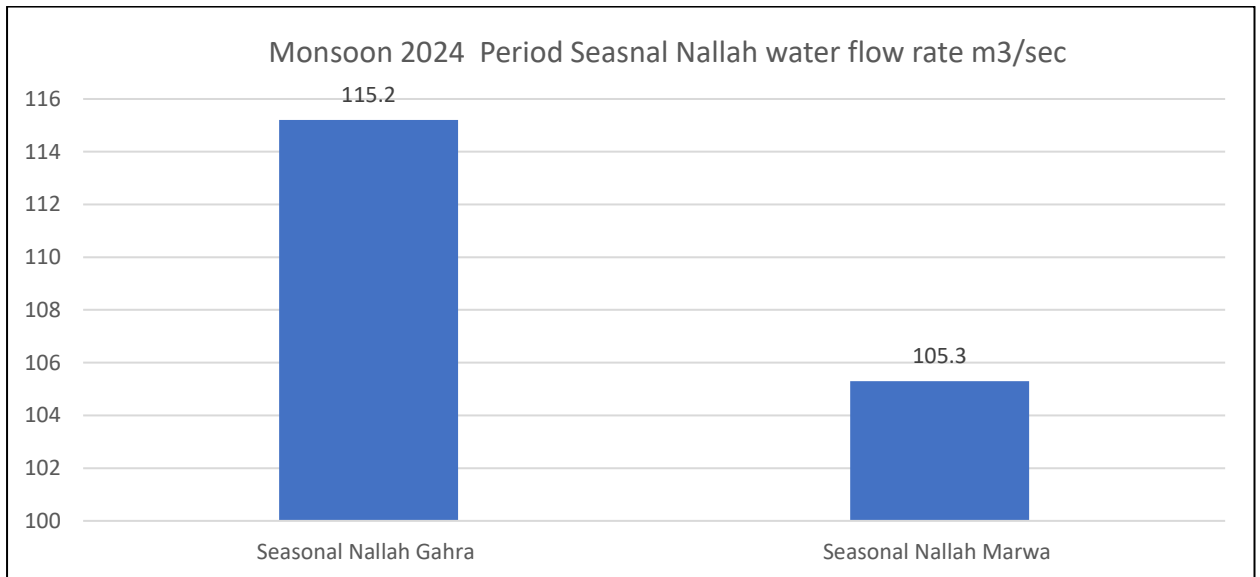
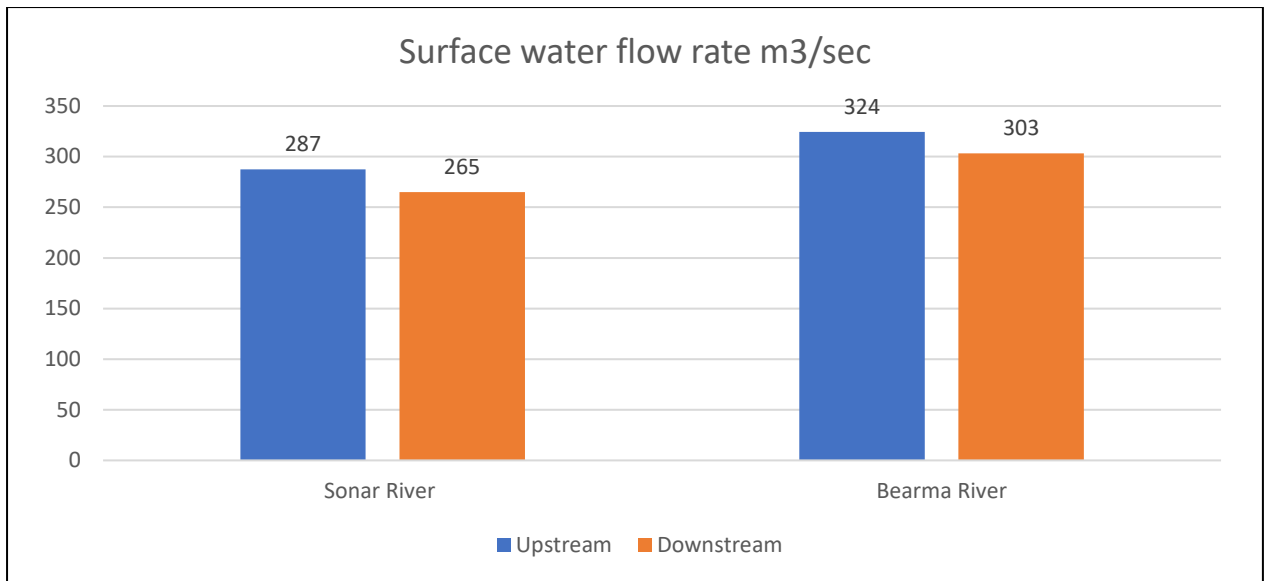
Sr.No.	Location	Parameters	Unit	Results		
				Jul-24	Aug-24	Sep-24
1	Sonar River upstream	Flow rate	m <sup>3</sup> /sec	621.5	226.7	221.2
2	Sonar River downstream			587.2	208.5	203.1
3	Bearma River upstream			567.3	284.3	275.3
4	Bearma River downstream			543.3	262.5	259.3
5	Seasonal Nallah Gahra			Dry	115.2	Dry
6	Seasonal Nallah Marwa			Dry	105.3	Dry













**Rainwater Harvesting in Mine Pit**



**Rainwater Harvesting in Garland Drain**



## KOLKARHIYA LIMESTONE MINES

## Blast Data Sheet

Date: 17/05/2024

Bench Data

LOCATION  
2nd BenchBlast Number  
01Firing Time  
1:30 PMRock Conditions  
(Geologic Structure)☒ Weak Joints☒ Tight Joints☒ Massive Rock

Pre Blast Inspection

Bench Conditions  
GoodFace Conditions  
GoodDrill holes Conditions  
Good

Blast Data

☒ Production☒ Development

Blast Area

Length(m)  
24MWidth(m)  
06MBench Height(m)  
05MVolume(m<sup>3</sup>)  
720M<sup>3</sup>

Blast Holes

Hole Diameter(mm)  
115MMHole Depth(m)  
05MAngle of Drilling(Deg.)  
90°Sub Drill(m)  
0.5MNumber of Holes  
20Total Depth(m)  
100MNumber of Rows  
03☒ RectangularBurden(m)  
3MSpacing(m)  
4M

Drilling Pattern

☒ Staggered

Stemming

Length(m)  
3.5Material type  
Drill CutMaterial Size(mm)  
0 to 8 mm

Total Explosive

Primer(Kg)  
225

Column Charge(Kg)

Initiation System

☒ Nonel

Connection Checked By

Name: KISHOR SINGH TANWAR

Signature: Blast Monitoring  
Vibration(mm/s)Transverse  
0.418Longitudinal  
0.883Vertical  
0.504

Fly Rock

☒ Front Side☒ Back Side

Post Blast Inspection

Fragmentation

☒ Poor☒ Moderate☒ Good

Boulders and Oversize

☒ Top☒ Inside☒ Bottom

Muck Pile Shape

☒ Exercise Clean Up☒ Moderate Clean Up☒ Bottom☒ Loose and Spread out☒ Tight and Compact☒ Tight

Remaining Rock Mass

☒ Back Break☒ Over Break☒ Under Break

Misfires

☒ Yes☒ No

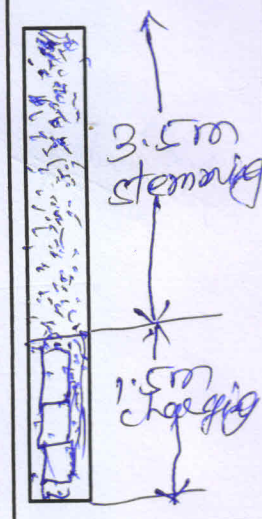
Blown Out

☒ Yes☒ No

Blast Assessment Data

Powder Factor(Ton./Kg)  
13.33T/Kg

General Charging Plan



Blasting Foreman

Blasting Incharge

Mines Manager



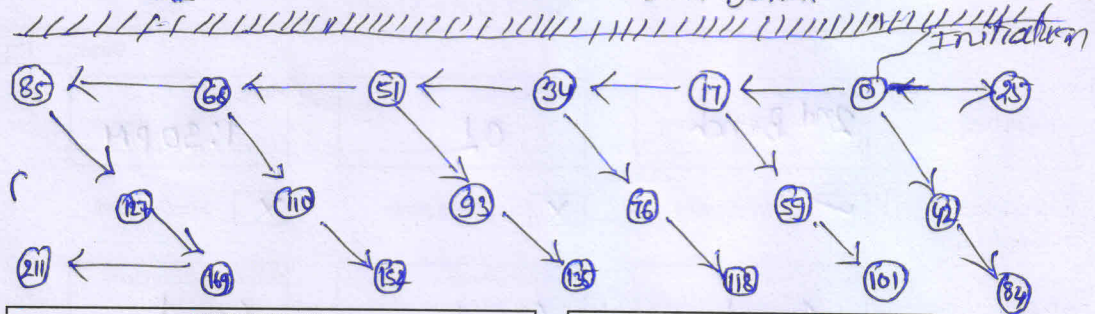
## KOLKARHIYA LIMESTONE MINES

## BLASTING PATTERN

Date: 17/05/2024

Blast No. - 01

Location/RL: 2nd Bench



## EXPLOSIVE USED

S.NO.	EXPLOSIVE	UOM	QUANTITY
1	Solar	Kg	225
2	Primex	Kg	—
3	Kelamboost	Kg	—
4	ANFO	Kg	—
5	DF	mtr	—
6	ED	Nos	01
7	DTH 10m	Nos	—
8	DTH 9m	Nos	—
9	DTH 6m	Nos	22
10	TLD 3/17	Nos	25
11	TLD 4/17	Nos	—
12	TLD 3/25	Nos	17
13	TLD 4/25	Nos	—
14	TLD 3/42	Nos	03
15	TLD 4/42	Nos	—

## HOLE GEOMETRY

DESCRIPTION	UOM	
No. of Holes	Nos.	20
Depth of Holes	mtr	5.5
Spacing	mtr	4
Burden	mtr	3
Stemming Height	mtr	3.5
No. of Row	Nos.	03
Powder Factor	Ton/Kg	13.33
Total Charge	Kg	225
Charge/Hole	Kg	11.25
Charge/Delay(Q)	Kg	11.25
Charge/Delay(Q MAX.)	Kg	11.25
Rock Generation	MT	3000

*[Signature]*  
Blasting Foreman

*[Signature]*  
Blasting Incharge

*[Signature]*  
Mines Manager



**Date/Time** Vert at 01:33:20 May 17, 2024  
**Trigger Source** Geo: 0.200 mm/s  
**Range** Geo: 254.0 mm/s  
**Record Time** 3.0 sec at 2048 sps  
**Job Number:** 2  
**Operator/Setup:** Operator/Pit-A 2nd bench.MMB

**Serial Number** UM21160 V 10-90GC Micromate ISEE  
**Battery Level** 3.8 Volts  
**Unit Calibration** November 3, 2023 by UES New Delhi  
**File Name** \_TEMP.EVT  
**Scaled Distance** 19.2 (303.1 m, 250.0 kg)

**GPS Location**      **Latitude**      **Longitude**  
 Source:      024 16.200 N      079 79.049 E  
 Sensor1:      024 16.213 N      079 79.228 E  
 Distance:      303.1 m

### Notes

**Location:** Kolkarhiya Limestone Mine  
**Client:** SMPL (A Unit of JSW Cement Ltd.)  
**User Name:** SMPL (A Unit of JSW Cement Ltd.)  
**General:** Limestone Mine

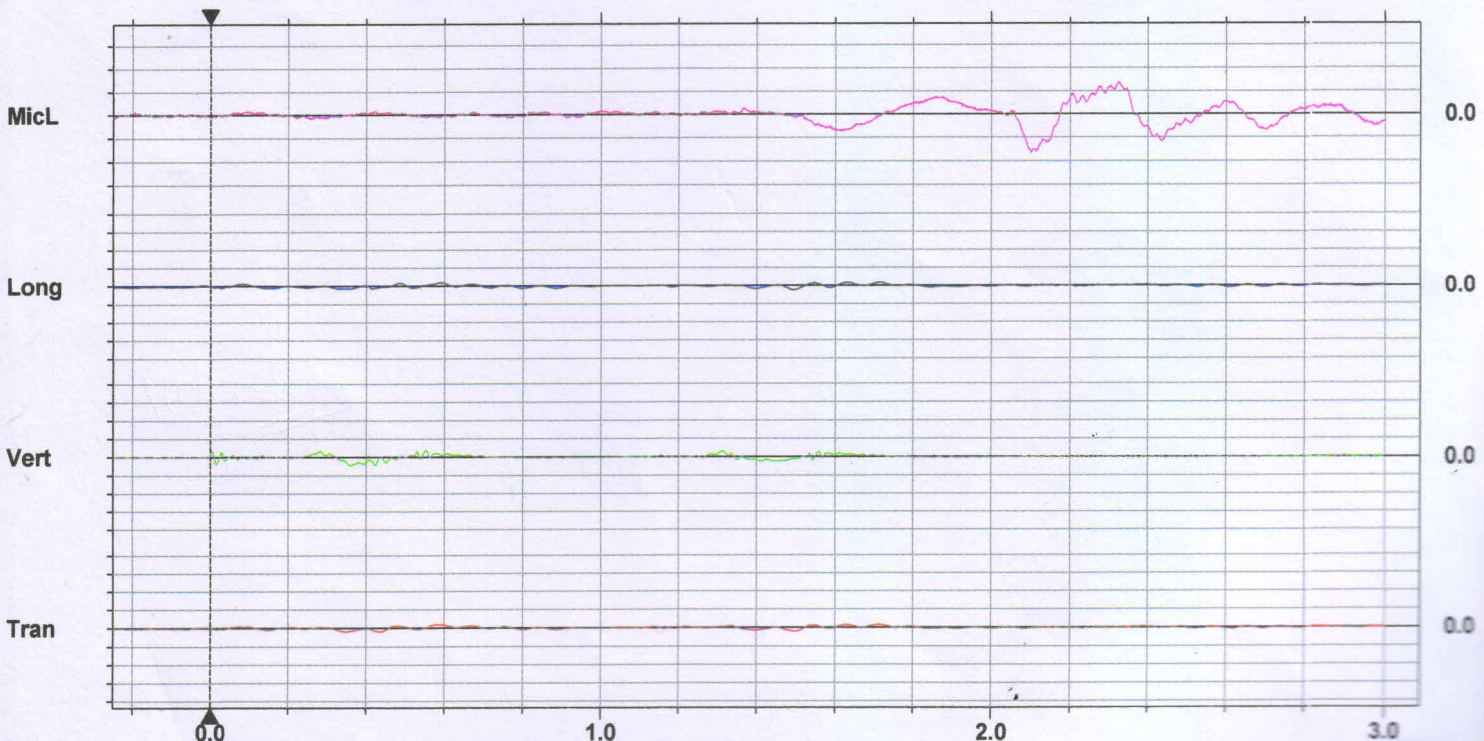
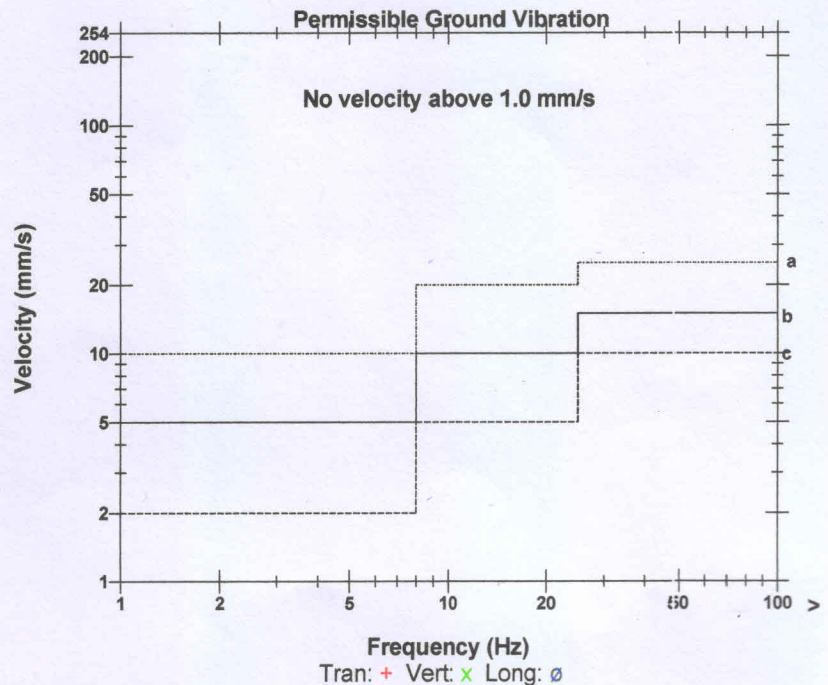
### Extended Notes


**Microphone** Linear Weighting  
**PSPL** 98.30 dB(L) at 2.100 sec  
**ZC Freq** 4.4 Hz  
**Channel Test** Passed (Freq = 20.5 Hz Amp = 1259 mv)

	Tran	Vert	Long	
PPV	0.418	0.883	0.504	mm/s
ZC Freq	3.3	4.6	8.3	Hz
Time (Rel. to Trig)	0.581	0.359	1.494	sec
Peak Acceleration	0.010	0.026	0.010	g
Peak Displacement	0.015	0.028	0.009	mm
Sensor Check	Passed	Passed	Passed	

**Peak Vector Sum** 0.970 mm/s at 0.360 sec

### DGMS India (A)



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

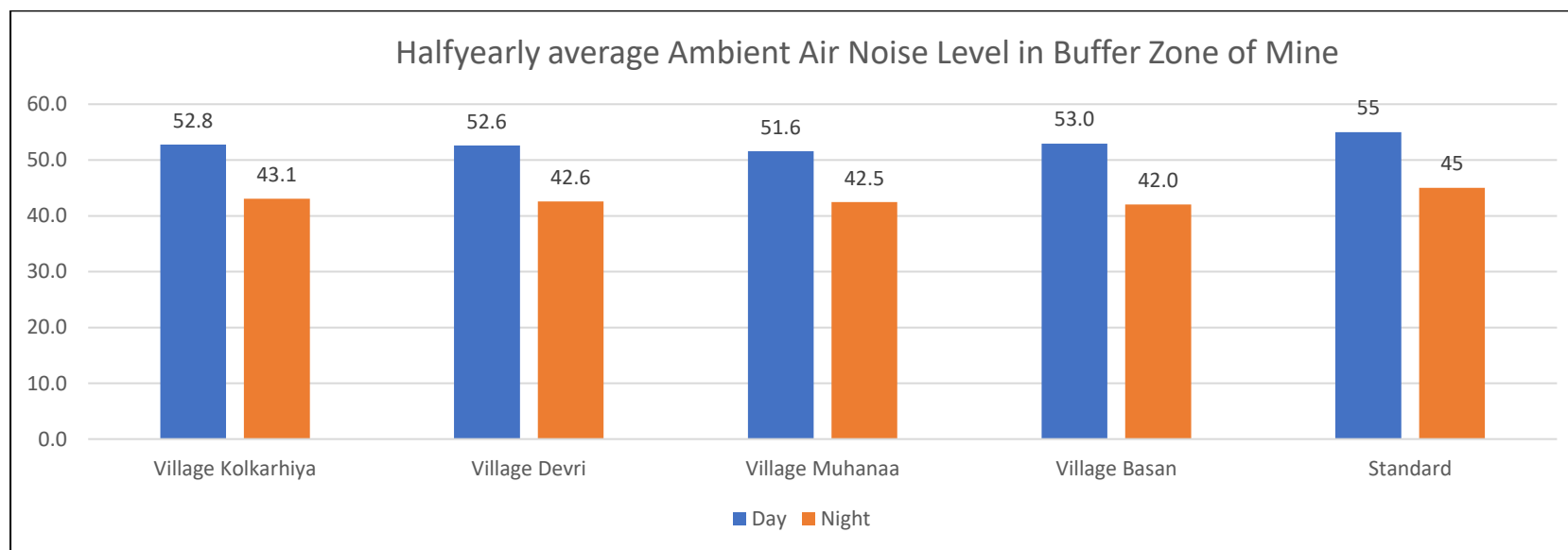
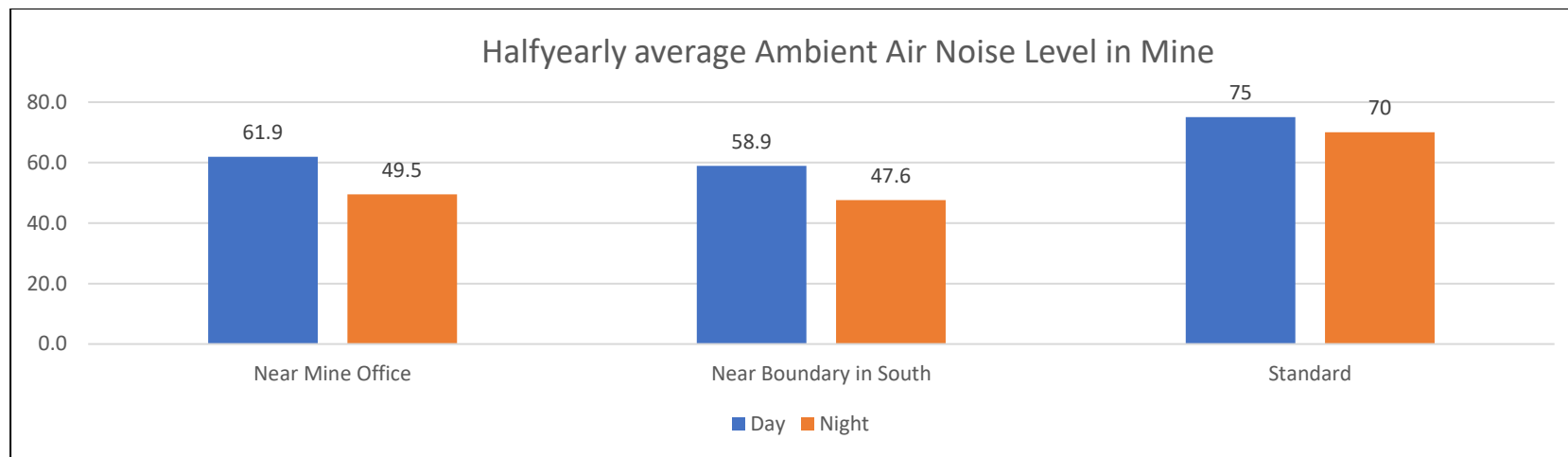
**M/s Springway Mining Private Limited**

at Village Kolkarhiya, Tehsil Simariya Dist. Panna (M.P.)

QUARTERLY AMBIENT AIR NOISE QUALITY MONITORING REPORT FOR KOLKARHIYA LIMESTONE MINE (CORE AND BUFFER ZONE)										
Sr.No.	Location Core Zone	Unit	Noise Level (Mine)						Limit (Industrial area)	
			Apr-24		May-24		Jun-24			
			Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time
1	Near Mine Office/Mine Site	dB(A)	60.2	49.7	61.5	48.2	62.4	47.9	75	70
2	Near Boundary in South	dB(A)	59.5	48.3	58.9	47.9	59.1	47.5		
	Location Buffer Zone		Noise Level (Village)						Limit (Residential area)	
		Unit	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time
3	Village Kolkarhiya	dB(A)	52.3	42.8	51.9	41.5	52.8	42.8	55	45
4	Village Devri	dB(A)	51.6	43.1	52.2	41.9	53.4	41.2		
5	Village Muhanaa	dB(A)	50.2	41.3	50.1	40.8	51.7	42.5		
6	Village Basan	dB(A)	53.8	42.4	52.8	41.2	56.4	41.5		

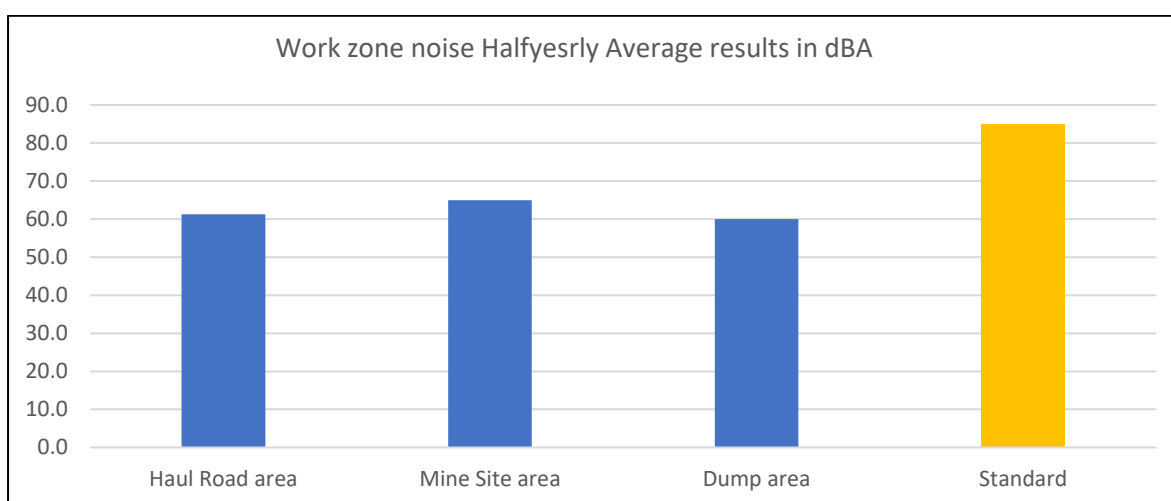
QUARTERLY AMBIENT AIR NOISE QUALITY MONITORING REPORT FOR KOLKARHIYA LIMESTONE MINE (CORE AND BUFFER ZONE)										
Sr.No.	Location Core Zone	Unit	Noise Level (Mine)						Limit (Industrial area)	
			Jul-24		Aug-24		Sep-24			
			Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time
1	Near Mine Office	dB(A)	63.7	50.2	62.5	49.5	61.2	51.3	75	70
2	Near Boundary in South	dB(A)	60.3	48.6	59.4	44.7	56.2	48.7		
	Location Buffer Zone		Noise Level (Village)						Limit (Residential area)	
		Unit	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time
3	Village Kolkarhiya	dB(A)	53.7	43.4	54.3	42.6	51.6	45.3	55	45
4	Village Devri	dB(A)	51.3	41.6	52.4	43.4	54.6	44.3		
5	Village Muhanna	dB(A)	53.6	44.2	52.6	43.4	51.2	42.5		
6	Village Basan	dB(A)	52.5	42.6	51.6	43.3	50.6	41.2		



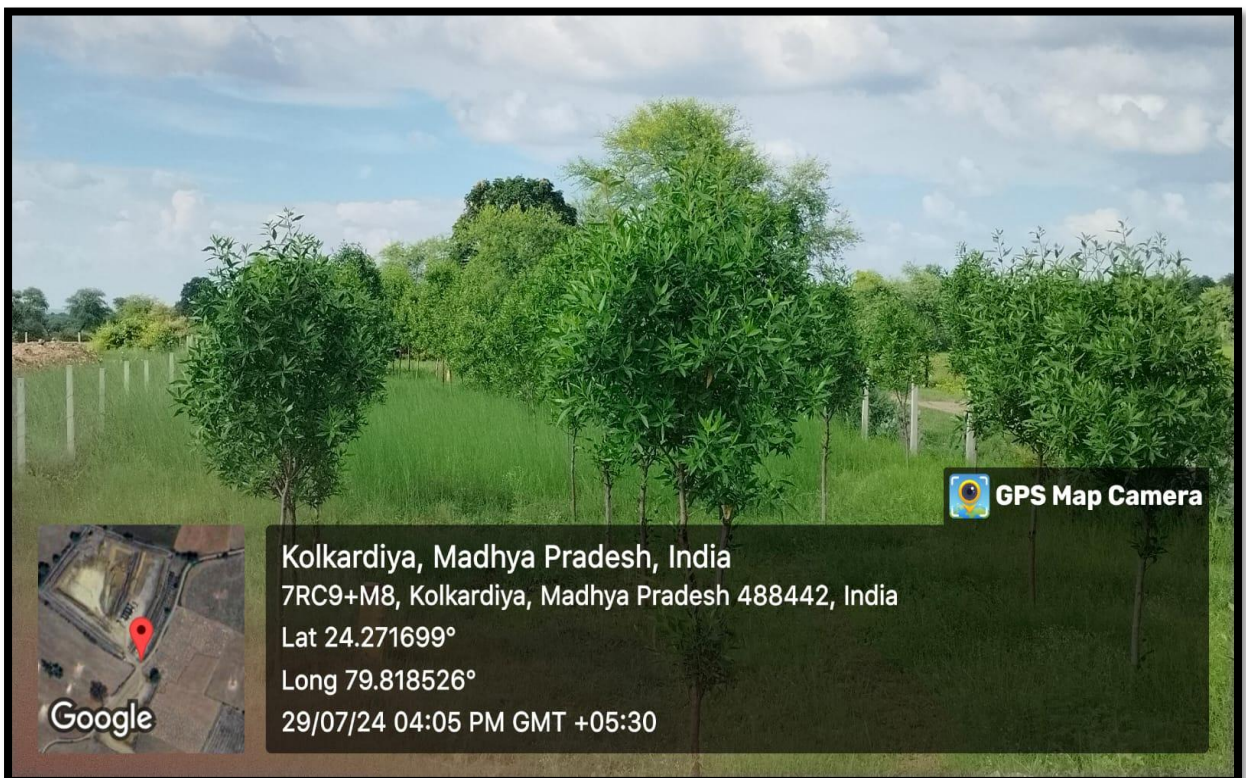


QUARTERLY WORK ZONE NOISE QUALITY MONITORING REPORT FOR KOLKARHIYA LIMESTONE MINE						
Sr.No.	Location	Unit	Work-zone Noise Level			Limit
			April-24	May-24	June-23	
1	Haul Road area	dB(A)	63.5	65.2	62.8	85 dB (Max)
2	Mine Site area	dB(A)	65.1	66.8	64.5	
5	Dump area	dB(A)	62.7	64.2	61.9	

QUARTERLY WORK ZONE NOISE QUALITY MONITORING REPORT FOR KOLKARHIYA LIMESTONE MINE						
Sr.No.	Location	Unit	Work-zone Noise Level			Limit
			July-24	Aug-24	Sep-24	
1	Haul Road area	dB(A)	60.4	59.4	56.2	85 dB (Max)
2	Mine Site area	dB(A)	65.3	64.3	63.7	
5	Dump area	dB(A)	58.6	57.5	55.1	



Photographs of Kolkardiya Limestone Mine FY 2022-23 Plantation Status





## Plantation Photographs of Kolkardiya Limestone Mine FY 2023-24





## New Plantation Photographs of Kolkardiya Limestone Mine FY 2024-25 (up to July 2024)

