

Ref: ACL/BYT/ENV/2024-2025/60

Date: 22.05.2024

To,

Regional Officer, Integrated Regional office, Ministry of Environment, Forest & Climate Change, Aranya Bhawan, North Block, Sector-19, Naya Raipur, Atal Nagar, Chhattisgarh 492002.

Sub: Submission of Half Yearly Environment Clearance Compliance Report along with Environmental Monitoring Report for the period October 2023 to March 2024 for Rawan Limestone Mines.

Ref: · EC letter no. J-11015/330/2006-IA II (M) dated 8th June 2007.

EMEN

BHATAPARA UNIT

Dear Sir.

Please find the enclosed herewith the six-monthly Environment Clearance compliance report along with Environmental Monitoring report from October 2023 to March 2024, for our Rawan Limestone Mine at Village & Post office-Rawan, Distt. Balodabazar, Chhattisgarh.

This is for your kind information and record.

Thanking you.

Yours Sincerely,

For Ambuja Cements Limited

(Unit: Bhatapara)

(Kaushal Kumar Mishra) Chief Operation Manager

Encl.: Six Monthly Environment Clearance compliance report along with Environment Monitoring report.

Cc: 1. CPCB, Zonal Office, Vithal Market, Paryavaran Parisar, E-5 Arera Colony Bhopal (MP) -462016

2. The M.S., CECB, Paryavas Bhavan, North Block Sector-19, Atal Nagar (C.G.) 490099.

3 The RO, CECB, Commercial Complex, Chhattisgarh Housing Board Colony, Kabir Nagar Raipur (C.G.)

Ambuja Cements Limited (Unit - Bhatapara)

P.O. - Rawan, Tehsil : Balodabazar, District: Balodabazar-Bhatapara - 493 331 Chhattisgarh, India

CIN: L26942GJ1981PLC004717

Registered Office: Adani Corporate House, Shantigram, S.G. Highway, Khodiyar, Ahmedabad- 382421 Gujarat, India Ph + 91 79-2555 5555 www.ambujacement.com

Environment Clearance Half Yearly Compliance Report (October 2023 – March 2024)

of

Rawan Limestone Mine
(Capacity: 6.31 MTPA, ML Area: 420.95 Ha.)

Located at
P.O. Rawan, Tehsil- Baloda Bazar,
District-Baloda Bazar- Bhatapara, Chhattisgarh



M/s AMBUJA CEMENTS LTD.

(Unit: Bhatapara)

P.O.: Rawan, Tehsil. &Dist.: Baloda Bazar - Bhatapara Chhattisgarh - 493331, India Compliance Status of Environmental Clearance Conditions accorded by MoEF&CC for the Expansion Project of Rawan Limestone Mine from 2.06 MTPA to 6.31 MTPA of M/s Ambuja Cements Ltd. Located at P.O. Rawan, Tehsil: Baloda Bazar, District Raipur, Chhattisgarh. Ref. no. J-11015/330/2006-IA II (M), dated: 8th June 2007

Sr.	EC Conditions	Compliance Status as						
No.		On 22 May 2024						
A. Sı	A. Specific Conditions							
i.	Topsoil shall be stacked properly with proper slope with adequate safeguards and shall be backfilled for reclamation and rehabilitation of mined out area. Over burden shall be stacked at earmarked dump	Being complied. Topsoil is stacked separately and utilization for reclamation and rehabilitation of mined out area and green belt development. Complied.						
	site(s) only and shall not be kept active for long period. The maximum height of the dump shall not exceed 20 m each stage shall preferably be of 10 m and over all slope of the dump shall not exceed 26°. The reverse slope shall be maintained to prevent wash off and water logging during rainy season. The mine pit area shall be reclaimed by back filling the OB in a phased manner. The OB dump shall be scientifically vegetated with suitable native species to prevent erosion and surface run off. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall submit to the Ministry Of Environment & Forests on six month basis.	The overburden dumps are having maximum height of 20 m and overall slope of 26° is being maintained. The reverse slope is being maintained to prevent wash off and water logging during rainy season. The mine pit area reclamation is being done by back filling the OB in phased manner. The OB is stacked at non mineralized area. Inactive OB dumps are being stabilized by coir matting followed by plantation of native plant species. Six monthly compliance is being submitted regularly to MoEF&CC Regional Office, Raipur. Last Six -monthly compliance report was submitted via mail dated 08.12.2022 copy is enclosed as Annexure-I.						
iii.	Garland drains shall be constructed to arrest silt and sediment flows from soil, and mineral dumps. The water so collected shall be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly. Garland drain (size, gradient and length) shall be constructed for both mine pit and for waste dump and sump capacity shall be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity shall also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and desilted at regular intervals	Complied. Garland drains are constructed around the dumps to arrest silt and sediment flows. The drains are connected to a settling tank or mine pits and accumulated water is being used for dust suppression, plantation etc. De-silting of garland drains is carried out at regular intervals. Photograph is enclosed as Annexure-II.						

Sr. No.	EC Conditions	Compliance Status as On 22 May 2024			
iv.	Controlled drilling and blasting shall be done by using dust extractors/wet drilling.	Complied Controlled blasting using non-electric delay initiation system is being practiced. Drilling is carried out with drill machines equipped with dust collector as well as water injection. Photograph is enclosed as Annexure-III.			
V.	Plantation shall be raised in an area of 98.04 ha including green belt of adequate width by planting the native species around the ML area, roads, OB dump sites etc. in consultation with the local DFO/Agriculture Department. The density of the trees shall be around 2500 plants per ha.	Phase wise plantation is being carried out as approved mine plan in safety zone, along roads and on inactive OB dumps as shown in Annexure IV . The			
vi.	The project authority shall implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.	er Conservation measures to augment ground water			
vii.	Regular monitoring of ground water level and quality shall be carried out by establishing well and constructing new piezometers during the mining operation. The monitoring shall be carried out four times in a year–pre-monsoon (April-May), monsoon (August), Post Monsoon (November) and winter (January) and the data thus collected may be sent regularly to MOEF, Central Ground Water Authority and Regional Director Central Ground Water Board.	Complied Three Piezometers are established in the ML area. Ground water level and quality is being monitored Post Monsoon (November) and winter (January). Water level monitoring and water quality analysis results enclosed as Annexure-VI. The installation work of Piezometers with telemetry system has been installed and photographs of same is attached as Annexure VI - a			
viii.	Prior permission from the competent authority shall be obtained for drawl of ground water, if any.	Complied. We have obtained the NOC from CGWA copy enclosed as Annexure-VII			
ix.	Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral. The vehicles shall be covered with a tarpaulin and shall not be overloaded.	Complied Transportation of mineral from crusher to plant by the fully covered belt conveyer and vehicles used for mineral transportation are maintained periodically to control exhaust emissions and all the vehicles are PUC certified. Overloading vehicles transporting minerals within the mine lease is strictly prohibited.			
X.	A final mine closure plan, along with details of corpus fund, shall be submitted to the Ministry of Environment & Forests and Climate Change 5 years in advance of final mine closure for approval.	Noted for compliance. Final mine closure plan, along with details of corpus fund, will be submitted to MoEF&CC, 5 years in advance of final mine closure.			

Sr.	EC Conditions	Compliance Status as				
No.		On 22 May 2024				
B. G	eneral Conditions					
i.	No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment & Forests and Climate Change.	Noted and Complied No change in mining technology and scope of working will be made without prior approval of MoEF&CC.				
ii.	No change in the calendar plan including excavation, quantum of mineral limestone ore shall be made.	Noted and Complied Limestone is being produced as per the calendar plan and EC permission.				
iii.	Conservation measures for protection of flora and fauna in the core and buffer zone shall be drawn up in consultation with the local forest and wildlife department.	Noted and complied. Thick plantation using local flora species is being carried out on safety zone, along transport roads and on inactive dumps with consultation of Forest Department. Fencing of the mining area is being carried out to avoid inadvertent entry of persons/animals. Plantation Survey has been conducted by consultant. The records available with industry.				
iv.	Four ambient air quality-monitoring stations shall be established in the core zone as well as in the buffer zone for RPM, SPM, SO2, NOx monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State pollution Control Board.	Complied Ambient Air quality monitoring locations have been established in the core zone and in buffer area. Regular air quality monitoring is being carried out by NABL Accredited lab Monitoring report is enclosed as Annexure-VI.				
V.	Data on ambient air quality (RPM, SPM, SO ₂ and NOx) should be regularly submitted to the Ministry including its regional office located at Bhopal and the State Pollution Control Board/ Central Pollution Control Board once in six months.	CPCB and CECB. Ambient air quality is regularly monitored by NABL accredited Lab and reports are submitted to regional office of MoEF&CC, CECB & CPCB regularly.				
vi.	Fugitive dust emissions from all the sources shall be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points shall be provided and properly maintained.	Mobile water sprinklers are provided for periodic water sprinkling on haul roads and fix sprinklers installed at loading and unloading points, etc. Regular water sprinkling is being carried out at fugitive dust emission sources to control dust emissions. Photograph enclosed as Annexure-VIII .				

Sr. No.	EC Conditions	Compliance Status as On 22 May 2024
vii.	Measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc shall be provided with ear plugs/muffs.	Complied Periodic maintenance of machinery used in mines is carried out to control noise below 85 dBA. Workers engaged in drilling & HEMM operations are provided with ear plugs/Muffs. Periodic noise level monitoring is conducted. The Ambient Noise monitoring report enclosed as Annexure-VI.
viii.	Industrial wastewater (workshop and wastewater from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May,1993 and 31st December, 1993 or as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluents.	Complied There is no process effluent generation in the mines. Effluent from workshop in the mine is treated in Oil and Grease trap system provided in the workshop. Surface run-off from the broken-up area is collected in settling tank/mine pits and is used for dust suppression and plantation. Analysis report is enclosed as Annexure-VI.
ix.	Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects.	Complied Protective Respiratory Devices (dust masks) are provided & safety appliances are being used by the workers. Shoes, dust mask, helmet & ear plug, have been provided & pre-employment and refresher safety training is being given to all the workers.
x.	Occupational health surveillance program of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	Complied Occupational health surveillance program for all workers are undertaken periodically as per Mine Acts.
xi.	A separate environmental management cell with suitable qualified personnel shall be set-up under the control of a senior executive, who will report directly to the Head of the organization.	Complied Environmental Management Cell has been established under supervision of Environmental Manager. The Environmental Manager directly reports to the Unit Head.
xii.	The project authorities shall inform to the Regional Office located at Bhopal regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	Complied Annual financial closures is on 31st December • Environmental Clearance granted by MOEF vide letter no. J-11015/330/2006-IA II (M) date:08.06.2007 • Mine is in operation since 1984.

Sr. No.	EC Conditions	Compliance Status as On 22 May 2024
xiii.	The fund earmarked for environmental protection measures shall be kept in separate account and should not be diverted to other purpose. Year wise expenditure shall be reported to the Ministry and its regional office Bhopal.	The environmental expenditure for the period October 2022 to March 2023 is enclosed as Annexure IX
xiv	The project authority shall inform to the Regional Office located at Bhopal regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	Complied Annual financial closures is on 31st December • Environmental Clearance granted by MOEF vide letter no. J-11015/330/2006-IA II (M) date:08.06.2007. Mine is in operation since 1984.
xv.	The Regional Office of this Ministry located at Bhopal shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/information/monitoring reports.	Noted.
xvi	A copy of clearance letter will be marked to concerned Panchayat/ local NGO, if any, from whom suggestion/representation has been received while processing the proposal.	Complied.
xvii.	State Pollution Control Board should display a copy of the clearance letter at the Regional Office, District Industry Centre and Collector's office/ Tehsildar's Office for 30 days.	Complied.
xviii	The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at the website of the Ministry of Environment and Forests at http://envfor.nic.in and a copy of the same shall be forwarded to the Regional Office of this Ministry located in Bhopal.	Complied. Published in Central chronical, Raipur dated 15.06.2018 and Harit Bhumi Raipur dated 15.06.2018, Copy is enclosed as Annexure-X

Sr.	EC Conditions	Compliance Status as
No.		On 22 May 2024
5.	The Ministry or any other competent authority may	
	alter/modify the above conditions or stipulate any	
	further condition in the interest of environmental	Noted.
	protection.	
6.	Failure to comply with any of the conditions	
	mentioned above may result in withdrawal of this	
	clearance and attract action under the provisions of	Noted.
	Environment (Protection) Act, 1986.	
7.	The above conditions will be enforced, inter-alia	
	under the provisions of the Water (Prevention &	
	Control of Pollution) Act, 1974. The Air (Prevention &	
	Control of Pollution) Act, 1981, the Environment	Noted
	(Protection) Act, 1986. Hazardous Wastes	
	(Management and Handling) Rules, 2003 and the	
	Public (insurance) Liability Act, 1991 along with their	
	amendments and rules.	

ACL BHATAPARA _Half Yearly EC Compliance Report Rawan Limestone Mine _ April 2023 - Sept 2023

Subash Awasthy <subhash.awasthi@adani.com>

Mon 27/11/2023 18:26

To:IRO Raipur <iro.raipur-mefcc@gov.in>

Cc:cpcb.bhopal@gmail.com <cpcb.bhopal@gmail.com>;eccompliance-cg@gov.in <eccompliance-cg@gov.in>;Head Office CECB (hocecb@gmail.com) <hocecb@gmail.com>;Regional Officer (rocecbraipur2014@gmail.com) <rocecbraipur2014@gmail.com>;Sanjay Prasad <Sanjay.Prasad@adani.com>;Mohit Kumar Chauhan <hookedani.com>;Sheeba Khan <sheeba.khan@adani.com>



ACL BHATAPARA _Half Yearly EC Compliance Report Rawan Limestone Mine _ April 2023 - Sept 2023.pdf.pdf;

Dear Sir,

Please find enclosed herewith Half yearly EC Compliance Report of stipulated conditions along with Monthly Environmental Monitoring Report for the period (April 2023 to September 2023) Ambuja Cements Ltd. Bhatapara Rawan Limestone Mine. Copy of same will be uploaded on the company & MOEFCC website shortly.

This is for your kind information and record please.

Regards

SUBHASH AWASTHI

Deputy General Manager (Environment & Sustainability)

I Ambuja Cements Limited I Rawan Village I Balodabazar District I

I Chhattisgarh I Pin - 493331 I

I Mobile- +91-8982073666 I Email – subhash.awasthi@adani.com I www.adani.com I



Annexure II

Garland Drain





Annexure III





Typical View of Drill with Dust Extractor system equipped with water injection system

Annexure IV

Green Belt Development



















Annexure V







Annexure VI

Typical View of Digital Piezo Level Monitoring











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TO, AMBUJA CEMENT LIMITED (UNIT: BHATAPARA) P.O. Rawan, Tehsil: Baloda Bazar, Dist.: Baloda Bazar-Bhatapara-493331					2-2023 to MARCH-2024 EARLY MONTHLY AVERAGE REPORT	
	Service services s	AMPLE I	ETAILS			
MONITORING FOR	AMBIENT AIR QUALITY MONIT	ORING	CUSTOMER F	REF. NO. & DATE	2800956665/NE08 Date:10/06/2023	
SAMPLING LOCATION	CORE ZONE RAWAN LIMEST	ONE MIN	E SOUTH B	LOCK WORKSHOP	?	
DURATION OF SAMPLING	24 HOURS					
SAMPLING PROCEDURE	OCEDURE AS PER METHOD REFERENCE					
SAMPLE QUANTITY/PACKING	FILTER PAPER (PM ₁₀): 1X1 NO., FILTER PAPER (PM _{2.5}): 1X1 NO. SO ₂ : 30MLX1 NO. PVC BOTTLE, NO ₂ : 30MLX1 NO. PVC BOTTLE RUBBER BLADDER: 1X1 NO.					

Parameter	Method Reference	NAAQM Standard	
Particulate Matter size less than 10 microns (PM ₁₀)	IS 5182 (Part 2 <mark>3): 200</mark> 6 & CPCB Guidelines VolI	100	
Particulate Matter size less than 2.5 microns (PM2.5)	IS 5182 (Part 24): 2019 CPCB Guidelines VolI	60	
Sulphur Dioxide (SO ₂)	IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI	80	
Nitrogen Dioxide (NO2)	IS 5182 (Part 6): 2006 & CPCB Guidelines VolI	80	
Carbon Monoxide (CO)*	IS 5182(Part 10):1999, RA 2003	4.0	

Sampling Location	Date of Sampling	РМ ₁₀ µg/m ³	РМ _{2.5} µg/m ³	SO₂ µg/m³	NO ₂ μg/m³	CO* mg/m³
	OCT-2023	49.84	16.38	15.85	16.48	0.64
RAWAN LIMESTONE MINE SOUTH BLOCK	NOV-2023	60.41	18.03	16.75	17.68	0.73
	DEC-2023	64.76	20.61	20.56	21.1	0.78
	JAN-2024	72,27	25.05	20.07	21.23	0.78
WORKSHOP	FEB-2024	72.61	22.05	21.23	21.30	0.81
	MAR-2024	73.50	23.11	20.81	20.80	0.79

Terms & conditions

The report for publication, arbitration or as legal dispute is forbidden.

Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.

This is for information as the party has asked for above test(s) only.

REVIEWED BY



For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

End of the test report-



QUANTITY/PACKING

HDD-272, PHASE III- NEAR JP CHOWK. PH - 0771 - 4027777 | email - ultimatenviro@gmail.com

Name & Address Of The Customer TO, AMBUJA CEMENT LIMITED (UNIT: BHATAPARA) P.O. Rawan, Tehsil: Baloda Bazar, Dist.: Baloda Bazar-Bhatapara-493331		SAMPLING MONTH TYPES OF REPORT		OCTOBER-2023 to MARCH-2024 HALF YEARLY MONTHLY AVERAGE REPORT		
	S	AMPLE I	DETAILS			
MONITORING FOR	AMBIENT AIR QUALITY MONIT	ORING	CUSTOMER RE	F. NO. & DATE	2800956665/NE08 Date:10/06/2023	
SAMPLING LOCATION	CORE ZONE RAWAN LIMESTONE	MINE NO	RTH BLOCK FIE.	LD OFFICE		
DURATION OF SAMPLING	24 HOURS					
SAMPLING PROCEDURE	URE AS PER METHOD REFERENCE					
SAMPLE OUANTITY/PACKING	FILTER PAPER (PM ₁₀): 1X1 N SO ₂ : 30MLX1 NO. PVC BOTTLE	The state of the s				

Parameter	Method Reference	NAAQM Standard	
Particulate Matter size less than 10 microns (PM ₁₀)	IS 5182 (Part 23): 2006 & CPCB Guidelines VolI	100	
Particulate Matter size less than 2.5 microns (PM2.5)	IS 5182 (Part 24): 2019 CPCB Guidelines VolI	60	
Sulphur Dioxide (SO ₂)	IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI	80	
Nitrogen Dioxide (NO2)	IS 5182 (Part 6): 2006 & CPCB Guidelines VolI	80	
Carbon Monoxide (CO)*	IS 5182(Part 10):1999, RA 2003	4.0	

Sampling Location	Date of Sampling	PM ₁₀ μg/m ³	PM _{2.5} μg/m ³	SO ₂ μg/m³	NO ₂ µg/m³	CO* mg/m³
	OCT-2023	57.77	16.33	16.25	16.93	0.66
RAWAN	NOV-2023	63.50	17.50	17.96	18.21	0.77
LIMESTONE MINE NORTHBLOCK	DEC-2023	71.20	22.43	19.30	21.40	0.81
	JAN-2024	72.40	22.60	20.50	22.50	0.71
FIELD OFFICE	FEB-2024	72.16	22.47	20.76	22.72	0.79
	MAR-2024	76.05	22.20	20.66	22.07	0.82

Terms & conditions

RUBBER BLADDER: 1X1 NO.

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This is for information as the party has asked for above test(s) only.

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Bure

AUTHORIZED SIGNATORY

End of the test report-



Name & Address of The Customer TO, AMBUJA CEMENT LIMITED (UNIT: BHATAPARA)			MONTH OF SAMPLING OCTOBER-2023		OBER-2023 TO MARCH-2024	
P.O. Rawan, Tehsil		eringenderblitendersbown	TYPES OF REP	ORT	HALF	YEARLY MONTHLY AVERAGE REPORT
		SZ	AMPLE DETAI	ILS		
SAMPLE TYPE	SURFACE WATER		ORDER /REFE	RENCE:	2	2800956665/NE08, Date10/06/2023
CUSTMER SAMPLE ID	RAWAN MINES GROUND WA	TER BORE	WELL	MALDI MO	PER (GROUND WATER BORE WELL
PACKING OF SAMPLE	3 L X 1 NO. PVC CAN 1 L X 1 NO. PVC CAN 1 L X 1 NO. GLASS BOTTLE	SEALED	SAMPLE COLL	ECTED BY	c	HEMIST
SAMPLING PROCEDURE	IS:3025(PART I):1987 2003; APHA 22ND ED. 2 1060-B, 1-39		QUANTITY RE	CEIVED	5	LTR

			TEST REPO	RT			
		and the same of th		AS PER IS	10500:2012		
SR. NO.	PARAMETER	UNIT METHOD OF TEST Acceptable Permissible Limit limit	Permissible limit	RESULT			
						RAWAN MINES GW BORE WELL	MALDI MOPAF GW BORE WEL
1	Colour	Hazen	IS:3025:(Part-4)	5	15	1	1
2	Odour	-	IS:3025:(Part-5)	Agreeable	Agree	Agree	Agree
3	Taste	_	IS:3025:(Part-8)	Agreeable	Agree	Agree	Agree
4	рН	-	APHA 23 rd Ed.2017,4500- H ⁺ -B, 4-92	6.5-8.5	No Relax	7.71	7.48
5	Turbidity	NTU	APHA 23 rd Ed.2017,2130- B,2-13	1	5	0.70	0.74
6	Electrical Conductivity	μS/cm	IS 3025(part-14):1984, RA 2013	-43	-	475.6	387.8
7	Total Dissolved Solids	mg/Lit	IS 3025(part-16):1984, RA 2006	500	2000	284	232
8	Alkalinity Total (as CaCO ₃)	mg/Lit	IS 3025(part-23):1986, RA 2003	200	600	102	126.0
9	Total Hardness (as CaCO ₃)	mg/Lit	APHA 23 rd Ed.2017,2340- C, 2-44,45	200	600	164	148.0
10	Calcium (as Ca)	mg/Lit	APHA 23 rd Ed.2017,3500- Ca-B, 3-67	75	200	43.29	44.09
11	Magnesium (as Mg)	mg/Lit	APHA 23 rd Ed.2017,3500- Mg-B, 3-84	30	100	13.64	9.23
12	Chloride (as Cl)	mg/Lit	APHA 23 rd Ed.2017,4500- CI-B, 4-72	250	1000	32.9	28.9
13	Sulphate (as SO ₄)	mg/Lit	APHA 23 rd Ed.2017,4500- SO ₄ -E, 4-190	200	400	24.75	32.02
14	Nitrate (as NO ₃)	mg/Lit	APHA 23 rd Ed.2017,4500- NO ₃ -B, 4-122	45	No Relax	4.32	6.9
15	Boron (as B)	mg/Lit	APHA 23 rd Ed.2017,4500- B-B, 4-25	0.5	1.0	BDL	BDL
16	Iron (as Fe)	mg/Lit	APHA 23 rd Ed.2017,3111- B,3-18	0.3	No Relax	0.03	0.01
17	Fluoride (as F)	mg/Lit	APHA 23 rd Ed.2017,4500- F-B & D, 4-84 & 87	1	1.5	0.01	0.02
18	Manganese (as Mn)	mg/Lit	APHA 23 rd Ed.2017,3111- B, 3-18	0.1	0.3	BDL	BDL
19	Lead (as Pb)	mg/Lit	APHA 23 rd Ed.2017,3111- B, 3-18	0.01	No Relax	BDL	BDL
20	Zinc (as Zn)	mg/Lit	APHA 23 rd Ed.2017,3111	5	15	BDL	BDL
21	Copper (as Cu)	mg/Lit	APHA 23 rd Ed.2017,3111-	0.05	1.5	BDL	BDL



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			TEST REPO	RT				
				AS PER IS	10500:2012			
SR. NO.	PARAMETER	UNIT	METHOD OF TEST	Acceptable	Permissible	RES	ULT	
				Limit	limit	RAWAN MINES GW BORE WELL	MALDI MOPAR GW BORE WELL	
			В, 3-18					
22	Cadmium (as Cd)	mg/Lit	APHA 23 rd Ed.2017,3500- Cd, 3-105	0.003	No Relax	BDL	BDL	
23	Mercury (as Hg)	mg/Lit	APHA 23 rd Ed.2017,3112- B, 3-23	0.001	No Relax	BDL	BDL	
24	Arsenic (as as)	mg/Lit	APHA 23 rd Ed.2017,3114- C, 3-38	0.01	0.05	BDL	BDL	
25	Aluminum (as Al)	mg/Lit	IS:3025:(Part-2)	0.01	No Relax	BDL	BDL	
26	Total Chromium (as Cr)	mg/Lit	IS:3025:(Part-2)	0.05	No Relax	BDL	BDL	
Micro	obiological Analysis			•	E		-	
1	Total Coliform	MPN/ 100 ML	IS: 1622:1981:RA:2019		detectable in nl sample	Absent	Absent	
2	E. Coli	MPN/ 100ml	IS: 1622:1981:RA:2 <mark>01</mark> 9	E CONTRACTOR OF THE PARTY OF TH	detectable in nl sample	Absent	Absent	

Note: mg/lit.: milligram per liter, N.D.: Not Detected.

REMARKS: RESULTS ARE AS ABOVE

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For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

Rub

End of the test report-



Name & Address of 7 TO, AMBUJA CEMENT (UNIT: BHATAPARA	LIMITED	MONTH OF SAM	PLING C	OCTOBER-2023 to MARCH-2024
P.O. Rawan, Tehsil Dist.: Baloda Bazaı	-Bhatapara-493331	TYPES OF REP		HALF YEARLY MONTHLY AVERAGE REPORT
SAMPLE TYPE	RO DRINKING WATER	ORDER /REFE		2800956665/NE08, Date10/06/2023
CUSTMER SAMPLE ID	RAWAN MINES RO DINKING WATE		ī	PER RO DRINKING WATER
PACKING OF SAMPLE	3 L X 1 NO. PVC CAN 1 L X 1 NO. PVC CAN 1 L X 1 NO. GLASS BOTTLE SEALED	SAMPLE COLL	ECTED BY	CHEMIST
SAMPLING PROCEDURE	IS:3025(PART I):1987 RA 2003; APHA 22ND ED. 2012, 1060-B, 1-39	QUANTITY RE	CEIVED	5 LTR

			TEST REPO	RT			
				AS PER IS	10500:2012		
SR. NO.	PARAMETER	UNIT	METHOD OF TEST	Acceptable	Permissible	RESULT	
				Limit	limit	RAWAN MINES RO DRINKING WATER	MALDI MOPAI RO DRINKING WATER
1	Colour	Hazen	IS:3025:(Part-4)	5	15	1	1
2	Odour		IS:3025:(Part-5)	Agreeable	Agree	Agree	Agree
3	Taste		IS:3025:(Part-8)	Agreeable	Agree	Agree	Agree
4 pH		11-2	APHA 23 rd Ed.2017,4500- H ⁺ -B, 4-92	6.5-8.5	No Relax	7.61	7.56
5 Turbidity		NTU	APHA 23 rd Ed.2017,2130- B,2-13	1	5	0.48	0.56
6	Electrical Conductivity μS/cm IS 3025(part-14):1984, RA 2013		-	-	288.9	302.5	
7	Total Dissolved Solids	mg/Lit	mg/Lit IS 3025(part-16):1984, RA 2006		2000	172	179.4
8	Alkalinity Total (as CaCO ₃)	mg/Lit	IS 3025(part-23):1986, RA 2003	200	600	84.0	62.0
9	Total Hardness (as CaCO ₃)	mg/Lit	APHA 23 rd Ed.2017,2340- C, 2-44,45	200	600	154	126
10	Calcium (as Ca)	mg/Lit	APHA 23 rd Ed.2017,3500- Ca-B, 3-67	75	200	42.48	18.95
11	Magnesium (as Mg)	mg/Lit	APHA 23 rd Ed.2017,3500- Mg-B, 3-84	30	100	11.66	11.66
12	Chloride (as Cl)	mg/Lit	APHA 23 rd Ed.2017,4500- CI-B, 4-72	250	1000	9.9	8.9
13	Sulphate (as SO ₄)	mg/Lit	APHA 23 rd Ed.2017,4500- SO ₄ -E, 4-190	200	400	5.6	4.56
14	Nitrate (as NO ₃)	mg/Lit	APHA 23 rd Ed.2017,4500- NO ₃ -B, 4-122	45	No Relax	1.12	1.21
15	Boron (as B)	mg/Lit	APHA 23 rd Ed.2017,4500- B-B, 4-25	0.5	1.0	BDL	BDL
16	Iron (as Fe)	mg/Lit	APHA 23 rd Ed.2017,3111- B,3-18	0.3	No Relax	BDL	BDL
17	Fluoride (as F)	mg/Lit	APHA 23 rd Ed.2017,4500- F-B & D, 4-84 & 87	1	1.5	BDL	BDL
18	Manganese (as Mn)	mg/Lit	APHA 23 rd Ed.2017,3111- B, 3-18	0.1	0.3	BDL	BDL
19	Lead (as Pb)	mg/Lit	APHA 23 rd Ed.2017,3111- B, 3-18	0.01	No Relax	BDL	BDL



			TEST REPO	RT			
	AS PER IS 10500:2012			10500:2012	RESULT		
SR. NO.	PARAMETER	UNIT	METHOD OF TEST	Acceptable Limit	Permissible limit	RAWAN MINES	MALDI MOPAR
						RO DRINKING WATER	RO DRINKING WATER
20	Zinc (as Zn)	mg/Lit	APHA 23 rd Ed.2017,3111- B, 3-18	5	15	BDL	BDL
21	Copper (as Cu)	mg/Lit	APHA 23 rd Ed.2017,3111- B, 3-18	0.05	1.5	BDL	BDL
22	Cadmium (as Cd)	mg/Lit	APHA 23 rd Ed.2017,3500- Cd, 3-105	0.003	No Relax	BDL	BDL
23	Mercury (as Hg)	mg/Lit	APHA 23 rd Ed.2017,3112- B, 3-23	0.001	No Relax	BDL	BDL
24	Arsenic (as as)	mg/Lit	APHA 23 rd Ed.2017,3114- C, 3-38	0.01	0.05	BDL	BDL
25	Aluminum (as Al)	mg/Lit	IS:3025:(Part-2)	0.01	No Relax	BDL	BDL
26	Total Chromium (as Cr)	mg/Lit	IS:3025:(Part-2)	0.05	No Relax	BDL	BDL
Micro	obiological Analysis				h		
1	Total Coliform	MPN/ 100 ML	IS: 1622:1981: <mark>RA:2019</mark>	The sign of the state of the st	detectable in nl sample	Absent	Absent
2	E. Coli	MPN/ 100ml	IS: 1622:1981:RA:2019	The state of the s	detectable in nl sample	Absent	Absent

Note: mg/lit.: milligram per liter, N.D.: Not Detected.

REMARKS: RESULTS ARE AS ABOVE

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This is for information as the party has asked for above test(s) only.

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--End of the test report--



Sample Quantity/Packing

HDD-272, PHASE III- NEAR JP CHOWK,
RING ROAD NO - 2, KABIR NAGAR, RAIPUR, C.G. -492099
PH - 0771 - 4027777 | email - ultimatenviro@gmail.com

Name & Address Of The Customer TO, AMBUJA CEMENT LIMITED (UNIT: BHATAPARA) P.O. Rawan, Tehsil: Baloda Bazar, Dist: Baloda Bazar-Bhatapara-493331		MONTH OF SAMPLING	OCTOBER-2023 to MARCH-2024
		TYPES OF REPORT	HALF YEARLY MONTHLY AVERAGE REPORT
	Si	AMPLE DETAILS	
Monitoring For	Work Place Air Monitor	ing (MINES)	
Customer Ref. No. & Date	2800956665/NE08, Date:	10/06/2023	
Duration Of Sampling	8 Hours		
Sample Collected By	Laboratory Chemist		
Sampling Procedure	As Per Method Referenc	е	
Sampling Procedure	As Per Method Referenc	e	

GMF Filter Paper (8 X 10 Inch): 1x1 No.

TES	ST REPORT			
Parameter	Unit	Result (SPM)	The Environment (Protection) Rules, 1986 Standard	Method Reference
Rawan Mines South Block Field Office	µg/m³	1598) t
Rawan Mines North Block Field Office	μg/m³	1567		
Rawan Mines South Block Haulage Road	μg/m³	1670		EPA
Rawan Mines North Block Haulage Road	μg/m³	1681	2000	Method Io - 2.1
Maldi Mines Workshop Area	μg/m³	1561		
Maldi Mines Haulage Road	μg/m³	1601		

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End of the test report-



Name & Address of The Customer

TO,

HDD-272, PHASE III - NEAR JP CHOWK.

RING ROAD NO - 2, KABIR NAGAR, RAIPUR, C.G. -492099

PH - 0771 - 4027777 | email - ultimatenviro@gmail.com

AMBUJA CEME (UNIT: BHATAP P.O. Rawan, Te Dist: Baloda Ba 493331	ARA) hsil: Baloda Bazar,	MONTH OF SAMPLING TYPES OF REPORT	OCTOBER-2023 to MARCH-2024 HALF YEARLY MONTHLY AVERAGE REPORT
	s	AMPLE DETAILS	
MONITORING FOR	NOISE LEVEL MONITORING		
CUSTOMER REF. NO. & DATE	2800956665/NE08, Date 10/0	6/2023	
SAMPLING LOCATION	MINES (CORE ZONE)		
SAMPLE COLLECTED BY	LABORATORY CHEMIST		
SAMPLING PROCEDURE	IS 9989:1981:RA 2001		

	1	EST REPO	RT			
		RES	ULT	LIMIT (INDUSTRIAL ZON		
LOCATION	UNIT	DAY TIME	NIGHT TIME	DAY TIME	NIGHT TIME	
Industrial Area						
MALDI MINES OFFICE	dB(A)	67.2	59.8			
RAWAN MINES NORTH BLOCK FEILD OFFICE	dB(A)	69.0	59.3	75	70	
RAWAN MINES SOUTH BLOCK FEILD OFFICE	dB(A)	70.8	52.9			
MALDI MINES CRUSHER AREA	dB(A)	71.0	62.7			

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Name & Address Of The Customer TO, AMBUJA CEMENT LIMITED (UNIT: BHATAPARA) P.O. Rawan, Tehsil: Baloda Bazar, Dist: Baloda Bazar-Bhatapara-493331		DATE OF SAMPLING	OCT	OBER-2023 to MARCH-2024
		TYPES OF REPORT	F YEARLY MONTHLY AVERAGE REPORT	
	S Contract S	SAMPLE DETAILS		
MONITORING FOR	SOIL	CUSTOMER REF. NO. &	DATE	2800956665/NE08, Date 10/06/2023
SAMPLING LOCATION	1. RAWAN MINES 2	. MALDI MINES		i.
SAMPLE COLLECTED BY	LABORATORY CHEMIST			
SAMPLING PROCEDURE	MANUAL ON SOIL, PLANT	T & WATER ANALYSIS		
SAMPLE QUANTITY/PACKING	3.0 KG (APPROX)			

	TEST REPORT								
Sr. No	Parameter	Unit	Method Reference	Rawan Mines	Maldi Mines				
	A. PHYSICAL PROPERTI	CES A							
1	Gravel	%	AGRICULTURE SOIL MANUAL	7.32	11.15				
2	Moisture	%	AGRICULTURE SOIL MANUAL	19.23	18.20				
3	Texture	-	AGRICULTURE SOIL MANUAL	CLAY LOAM	CLAY LOAM				
4	Bulk density	g/cm3	AGRICULTURE SOIL MANUAL	1.3	1.3				
PARI	CICLE SIZE DISTRIBUT	ION							
	Sand	%	AGRICULTURE SOIL MANUAL	42.4	45.2				
5	Silt	%	AGRICULTURE SOIL MANUAL	27.3	26.0				
	Clay	%	AGRICULTURE SOIL MANUAL	20.3	30.2				
6	Permeability	cm/sec	AGRICULTURE SOIL MANUAL	10 ⁻⁷	10-4				
7	Water Holding Capacity	%	AGRICULTURE SOIL MANUAL	17.02	18.10				
1	B. CHEMICAL PROPERTI	TES .							
8	pH (1:2.5 Aq. Extract) At 25 C	ŧ	IS: 2720: (PART-26):1987 RA 2011	7.20	7.26				
9	Electrical Conductivity (1:2.5 Aq. Extract)	μs/cm	IS: 14767:2000 RA 2016	240	241				
10	Total Organic matter	%	AGRICULTURE SOIL MANUAL	4.19	4.10				
11	Total Organic Carbon	%	AGRICULTURE SOIL MANUAL	1.42	1.45				
12	Available Nitrogen (as N)	Kg/hec	AGRICULTURE SOIL MANUAL	281	280				
13	Available Phosphorous (as P)	Kg/hec	AGRICULTURE SOIL MANUAL	18.0	17.3				
14	Available Potassium (as K)	Kg/hec	AGRICULTURE SOIL MANUAL	145.0	144.5				
15	Water soluble Sulphate (as SO ⁴)	mg/Kg	AGRICULTURE SOIL MANUAL	109.2	110.5				
16	Available Boron (B)	mg/Kg	AGRICULTURE SOIL MANUAL	BDL	BDL				
17	Available Iron (Fe)	mg/Kg	AGRICULTURE SOIL MANUAL	0.36	0.37				



TEST REPORT							
Sr. No	Parameter	Unit	Method Reference	Rawan Mines	Maldi Mines		
18	Available Copper (Cu)	mg/Kg	AGRICULTURE SOIL MANUAL	0.33	0.20		
19	Available Zinc (Zn)	mg/Kg	AGRICULTURE SOIL MANUAL	0.30	0.36		
20	Available Manganese (Mn)	mg/Kg	AGRICULTURE SOIL MANUAL	0.24	0.25		
21	Total Chromium (Cr)	mg/Kg	AGRICULTURE SOIL MANUAL	BDL	BDL		
22	Molybdenum (Mo)	mg/Kg	AGRICULTURE SOIL MANUAL	BDL	BDL		
23	Total Lead (Pb)	mg/Kg	AGRICULTURE SOIL MANUAL	1.45	1.48		
24	Total Cadmium (Cd)	mg/Kg	AGRICULTURE SOIL MANUAL	BDL	BDL		
25	Total Selenium (Se)	mg/Kg	AGRICULTURE SOIL MANUAL	BDL	BDL		
26	Total Nickel (Ni)	mg/Kg	AGRICULTURE SOIL MANUAL	BDL	BDL		

N.D.:-NOT DETECTED

REMARKS: RESULTS ARE AS ABOVE

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-End of the test report-



TO, AMBUJA CEMENT (UNIT: BHATAPAI	LIMITED	MONTH OF SAMPLING	OCTOBER-2023 to MARCH-2024	
P.O. Rawan, Tehs		TYPES OF REPORT	HALF YEARLY REPORT	
	SAME	PLE DETAILS		
MONITORING FOR	STACK EMISSION MONITORI	NG		
CUSTOMER REF. NO. & DATE	2800956665/NE08, Date 1	0/06/2023		
SAMPLE COLLECTED BY	LABORATORY CHEMIST			
SAMPLING PROCEDURE	IS 11255 PART 1,2:1985	REAFFIRMED 2009; PA	RT 3:2008	
SAMPLE QUANTITY/PACKING	THIMBLE: 1 X 1 NO.,			

			TEST	REPO	RT			
RAWAN MINES	CRUSHER .	LINE 01	RAWAN MINES	CRUSHER	LINE 02	MALDI MOPA	AR MINES	CRUSHER
MONTH	UNIT	RESULT	MONTH	UNIT	RESULT	MONTH	UNIT	RESULI
OCTOBER	mg/Nm ³	15.18	OCTOBER	mg/Nm³	13.29	OCTOBER	mg/Nm³	18.19
NOVEMBER	mg/Nm ³	16.17	NOVEMBER	mg/Nm ³	15.23	NOVEMBER	mg/Nm ³	18.77
DECEMBER	mg/Nm ³	17.18	DECEMBER	mg/Nm ³	16.12	DECEMBER	mg/Nm ³	19.12
JANUARY	mg/Nm ³	17.22	JANUARY	mg/Nm ³	17.08	JANUARY	mg/Nm ³	18.01
FEBRUARY	mg/Nm³	17.59	FEBRUARY	mg/Nm ³	17.93	FEBRUARY	mg/Nm ³	19.10
MARCH	mg/Nm³	18.01	MARCH	mg/Nm ³	18.12	MARCH	mg/Nm ³	19.70

REMARKS: Results Are As Above

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-End of the test report.....



RING ROAD NO - 2, KABIR NAGAR, RAIPUR, C.G. -492099 PH - 0771 - 4027777 | email - ultimatenviro@gmail.com

Name & Address Of The Custom TO, AMBUJA CEMENT (UNIT: BHATAPAI	LIMITED	MONTH OF SAMPLING	OCTOBER-2023 to MARCH-2024		
P.O. Rawan, Tehs Dist: Baloda Baza	il: Baloda Bazar, r-Bhatapara-493331	TYPES OF REPORT	HALF YEARLY MONTHLY REPORT		
	SAME	PLE DETAILS			
MONITORING FOR	STACK EMISSION MONITORI	NG			
CUSTOMER REF. NO. & DATE	2800956665/NE08, Date 1	0/06/2023			
SAMPLE COLLECTED BY	LABORATORY CHEMIST				
SAMPLING PROCEDURE	IS 11255 PART 1,2:1985 REAFFIRMED 2009; PART 3:2008				
SAMPLE QUANTITY/PACKING THIMBLE: 1 X 1 NO.,					

			TEST	REPO	RT			
RAWAN MINES	CRUSHER	LINE 01	RAWAN MINE	S CR <mark>US</mark> HER	LINE 02	MALDI MOPA	AR MINES	CRUSHER
MONTH	UNIT	RESULT	MONTH	UNIT	RESULT	MONTH	UNIT	RESULT
OCTOBER	mg/Nm ³	15.18	OCTOBER	mg/Nm³	13.29	OCTOBER	mg/Nm³	18.19
NOVEMBER	mg/Nm ³	16.17	NOVEMBER	mg/Nm ³	15.23	NOVEMBER	mg/Nm ³	18.77
DECEMBER	mg/Nm³	17.18	DECEMBER	mg/Nm ³	16.12	DECEMBER	mg/Nm ³	19.12
JANUARY	mg/Nm ³	17.12	JANUARY	mg/Nm ³	17.08	JANUARY	mg/Nm ³	18.01
FEBRUARY	mg/Nm³	17.59	FEBRUARY	mg/Nm ³	17.93	FEBRUARY	mg/Nm ³	19.10
MARCH	mg/Nm ³	18.01	MARCH	mg/Nm ³	18.12	MARCH	mg/Nm ³	19.70

REMARKS: Results Are As Above

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End of the test report......



Name & Address of 7 TO, AMBUJA CEMENT	1	MONTH OF SAMPLING	oc:	FOBER-2	023 to MARCH-2024		
(UNIT: BHATAPAR/ P.O. Rawan, Tehsil Dist.: Baloda Bazar			TYPES OF REPORT	HALF YEARLY MONTHLY AVERAGE REPO			
		SA	MPLE DETAILS				
SAMPLE TYPE	SURFACE WATER		ORDER /REFERENCE:		2800956	665/NE08, Date10/06/2023	
CUSTMER SAMPLE ID	RAWAN MINES SOUTH BLOCK	PIT	RAWAN MINES NORTH BL	ock	PIT	MALDI MOPAR MINES PIT	
PACKING OF SAMPLE	3 L X 1 NO. PVC CAN 1 L X 1 NO. PVC CAN 1 L X 1 NO. GLASS BOTTLE	LED	SAMPLE COLLECTED BY		CHEMIST	*	
SAMPLING PROCEDURE	IS:3025(PART I):1987 RA 2003; APHA 22ND ED. 2012 1060-B, 1-39	2,	QUANTITY RECEIVED		5 LTR		

				AS PER IS	10500:2012			
SR.	PARAMETER	UNIT	METHOD OF TEST	Acceptable	Permissible	RESULT		
				Limit	limit	RAWAN MINES S/BLOCK	RAWAN MINES N/BLOCK	MALDI
1	Colour	Hazen	IS:3025:(Part-4)	5	15	1	1	
2	Odour	112	IS:3025:(Part-5)	Agreeable	Agree	Agree	Agree	Agree
3	Taste		IS:3025:(Part-8)	Agreeable	Agree	Agree	Agree	Agree
4	рН		APHA 23 rd Ed.2017,4500- H ⁺ -B, 4-92	6.5-8.5	No Relax	7.28	7.29	7.27
5	Turbidity	NTU	APHA 23 rd Ed.2017,2130- B,2-13	1	5	2.1	1.75	1.4
6	Electrical Conductivity	μS/cm	IS 3025(part-14):1984, RA 2013	-	_	269.5	271.3	319.
7	Chemical Oxygen Demand	mg/Lit	IS:3025:(Part-58):2006, RA 2012		-	22.11	28.01	27.0
8	Bio-chemical Oxygen Demand at 27°C for three days	mg/Lit	IS:3025:(Part-44):1993 RA 2014		-	6.06	5.61	6.03
9	Total Dissolved Solids	mg/Lit	IS 3025(part-16):1984, RA 2006	500	2000	173.1	169.0	178.0
10	Alkalinity Total (as CaCO ₃)	mg/Lit	IS 3025(part-23):1986, RA 2003	200	600	110.2	109.0	111.
11	Total Hardness (as CaCO ₃)	mg/Lit	APHA 23 rd Ed.2017,2340- C, 2-44,45	200	600	114.1	111.0	124.
12	Calcium (as Ca)	mg/Lit	APHA 23 rd Ed.2017,3500- Ca-B, 3-67	75	200	24.09	29.02	25.10
13	Magnesium (as Mg)	mg/Lit	APHA 23 rd Ed.2017,3500- Mg-B, 3-84	30	100	7.13	10.01	11.2
14	Chloride (as Cl)	mg/Lit	APHA 23 rd Ed.2017,4500- Cl-B, 4-72	250	1000	17.2	23.03	16.6
15	Sulphate (as SO ₄)	mg/Lit	APHA 23 rd Ed.2017,4500- SO ₄ -E, 4-190	200	400	16.13	15.61	21.7
16	Nitrate (as NO ₃)	mg/Lit	APHA 23 rd Ed.2017,4500- NO ₃ -B, 4-122	45	No Relax	5.02	6.02	6.26
17	Boron (as B)	mg/Lit	APHA 23 rd Ed.2017,4500- B-B, 4-25	0.5	1.0	BDL	BDL	BDL
18	Iron (as Fe)	mg/Lit	APHA 23 rd Ed.2017,3111- B,3-18	0.3	No Relax	0.27	0.13	0.02
19	Fluoride (as F)	mg/Lit	APHA 23 rd Ed.2017,4500- F-B & D, 4-84 & 87	1	1.5	0.06	0.03	0.06



			TEST REPO	RT				
				AS PER IS	10500:2012			
SR. NO.	PARAMETER	UNIT	METHOD OF TEST	Acceptable Limit	Permissible limit	RAWAN MINES	RESULT RAWAN MINES	MALDI MINES
			APHA 23 rd Ed.2017,3111-			S/BLOCK	N/BLOCK	
20	Manganese (as Mn)	mg/Lit	B, 3-18	0.1	0.3	BDL	BDL	BDL
21	Lead (as Pb)	mg/Lit	APHA 23 rd Ed.2017,3111- B, 3-18	0.01	No Relax	BDL	BDL	BDL
22	Zinc (as Zn)	mg/Lit	APHA 23 rd Ed.2017,3111- B, 3-18	5	15	BDL	0.8	BDL
23	Copper (as Cu)	mg/Lit	APHA 23 rd Ed.2017,3111- B, 3-18	0.05	1.5	BDL	BDL	BDL
24	Cadmium (as Cd)	mg/Lit	APHA 23 rd Ed.2017,3500- Cd, 3-105	0.003	No Relax	BDL	BDL	BDL
25	Mercury (as Hg)	mg/Lit	APHA 23 rd Ed.2017,3112- B, 3-23	0.001	No Relax	BDL	BDL	BDL
26	Arsenic (as as)	mg/Lit	APHA 23 rd Ed.2017,3114- C, 3-38	0.01	0.05	BDL	BDL	BDL
27	Aluminum (as Al)	mg/Lit	IS:3025:(Part-2)	0.01	No Relax	BDL	BDL	BDL
28	Dissolved Oxygen	mg/Lit	IS:3025:(Part-38)		-	3.8	3.1	4.8
29	Total Chromium (as Cr)	mg/Lit	IS:3025:(Part-2)	0.05	No Relax	BDL	BDL	BDL
Micro	obiological Analysis						<u> </u>	
1	Total Coliform	MPN/ 100 ML	IS: 1622:1981 <mark>:RA:2019</mark>	2000	detectable in	39.6	61.0	53.0
2	E. Coli	MPN/ 100ml	IS: 1622:1981:RA:2019	A THE RESERVE OF THE PARTY OF T	detectable in nl sample	26.3	20.0	37.3

Note: mg/lit.: milligram per liter, N.D.: Not Detected.

REMARKS: RESULTS ARE AS ABOVE

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--End of the test report-



TO, AMBUJA CEMENT LIMITED (UNIT: BHATAPARA) P.O. Rawan, Tehsil: Baloda Bazar, Dist: Baloda Bazar-Bhatapara-493331		Month of Sampling	OCTOBER-2023 TO MARCH-2024	
		Types of report	HALF YEARLY MONTHLY AVERAGE REPORT	
	SA	MPLE DETAILS		
Sample Type	Effluent Water	Customer Ref. No. 6	2800956665/NE08 Date10/06/2023	
Customer Sample Id	Rawan Mines Etp Inlet /Outlet	Sample Condition At Receipt	Ok Ok	
Packing Of Sample	Jerry Cane (2.5 ltr.*1) Glass bottle (300ml*1)	Sample Collected By	y Laboratory Chemist	
Other Details	Sealed	Quantity Received	Approx. 5.0 Ltr.	

TEST REPORT								
SR. NO.	PARAMETER	UNIT	METHOD OF TEST	LIMITS AS PER TREATED WATER	ETP INLET (UNTREATED)	ETP OUTLET (TREATED)		
1	pH Value at 25.2°C	_	IS:3025:(Part-11): 1983,RA 2012	5.5 To 9.0	7.59	7.43		
2	Total Suspended Solid	mg/L	IS:3025: (Part-17): 1984,RA 2012	100	269.0	59.2		
3	Total Dissolved Solids	mg/L	IS:3025: (Part-16)	-	279.0	257.0		
4	Chemical Oxygen Demand	mg/L	IS:30 <mark>25:(Par</mark> t- 58): <mark>2006,RA 201</mark> 2	250	149.0	44.0		
5	Bio-chemical Oxygen Demand at 27°C for three day	mg/L	IS:3025:(Part44) :1993,RA 2014	30	42.1	11.04		
6	Oil & Grease	mg/L	IS:3025: (Part39) :1986	10	Absent	Absent		

Note:mg/lit.: milligram per liter. N.D.: Not Detected.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

> The report for publication, arbitration or as legal dispute is forbidden.

> Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.

This is for information as the party has asked for above test(s) only.

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For ULTIMATE ENVIROLYTICAL SOLUTIONS

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AUTHORIZED SIGNATORY

-End of the test report-



RING ROAD NO - 2, KABIR NAGAR, RAIPUR, C.G. -492099

Name & Address of The Customer TO, MONTH OF SAMPLING March-2024 **AMBUJA CEMENT LIMITED** (UNIT: BHATAPARA)

P.O. Rawan, Tehsil: Baloda Bazar, Dist.: Baloda Bazar-Bhatapara-493331 DATE OF REPORT

HALF YEARLY MONTHLY AVERAGE REPORT

SAMPLE DETAILS 2800956665/NE08, SAMPLING LOCATION PIEZO LEVEL MONITORING ORDER /REFERENCE: Date10/06/2023 GROUND WATER LEVEL MONITORING MONITORING FOR SAMPLE COLLECTED BY LABORATORY CHEMIST

s.no	NAME OF VILLAGE	SAMPLE CODE	DATE OF MEASURMENT	DEPTH (MTR)
1	LATWA	GW-1	07-03-2024	6.20
2	СННИІНА	GW-2	07-03-2024	6.70
3	KUKURDIH	GW-3	07-03-2024	5.74
4	RAWAN	GW-4	07-03-2024	5.90
5	PAUSARI	GW-5	07-03-2024	6.10
6	KHAMRIYA	GW-6	07-03-2024	4.70
7	KARMADA	GW-7	07-03-2024	7.30
8	ARJUNI	GW-8	07-03-2024	6.50
9	MALDI	GW-9	07-03-2024	5.40
10	MOPAR	GW-10	07-03-2024	4.80
11	DEVRANI	GW-11	07-03-2024	4.90
12	SEMRADIH	GW-12	07-03-2024	7.10
13	CHANDIH	GW-13	07-03-2024	6.80
14	CHAMPA	GW-14	07-03-2024	7.60
15	DHABADIH	GW-15	07-03-2024	5.30
16	RISDA	GW-16	07-03-2024	4.10
17	TOPA	GW-17	07-03-2024	6.80
18	AMERA	GW-18	07-03-2024	5.70
19	MAGARCHABA	GW-19	07-03-2024	3.30
20	BHADARPALLI	GW-20	07-03-2024	6.00
21	BALODA BAZAR	GW-20	07-03-2024	5.10

Note: mg/lit.: milligram per liter, N.D.: Not Detected.

REMARKS: RESULTS ARE AS ABOVE

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AUTHORIZED SIGNATORY

End of the test report-



NANDAKUMARAN P MEMBER SECRETARY

भारत सरकार जल शक्ति मंत्रालय जल संसाधन, नदी विकास और गंगा संरक्षण विभाग भूमि जल प्राधिकरण

Government of India
Ministry of Jal Shakti
Department of Water Resources,
River Development and Ganga Rejuvenation
Central Ground Water Authority

CGWA/IND/Proj/2019-375-R

Dated:-0 5 SEP 2019

No.21-4(117)/NCCR/CGWA/2011-762

M/s Ambuja Cements Ltd.,
(Unit-Bhatapara), Village & P.O.- Rawan
Block & Tehsil- Balodabazar

Dist- Balodabazar: Bhatapara, Chhattisgarh - 493331

Sub: - Renewal of NOC for ground water withdrawal to M/s Ambuja Cements Ltd., for their existing Integrated cement manufacturing, captive power plant and Limestone Mine located at Villages Rawan, Kukurdih, Pausari and Bharseli, Block &Tehsil Balodabazar ,District Balodabazar:Bhatapara, Chhattisgarh - reg.

Refer to your application dated 31/10/2018 on the above cited subject. Based on recommendation of Regional Director, Central Ground Water Board, North Central Chhattisgarh Region, Raipur vide his office letter No 35-1/NCCR/CGWA/Vol-XI-818 dated 17/06/2019, and further deliberations on the subject, the NOC issued to M/s Ambuja Cements Ltd., for their existing Integrated cement manufacturing, captive power plant and Limestone Mine located at Villages Rawan, Kukurdih, and Bharseli. Block &Tehsil Balodabazar Balodabazar:Bhatapara, Chhattisgarh vide this office letter of even no. dated 06/11/2015 is hereby renewed. The earlier NOC issued vide Letter No. 21-4(117)/NCCR/CGWA/2011-1739 dated 06/11/2015 shall be deemed to be extended from 05/11/2018 to 25/07/2019 and the renewed NOC shall be valid from 26/07/2019 to 25/07/2024 and shall be subject to the following conditions:-

1. The firm may continue to abstract 1,11,325 cu.m/year of ground water through twelve (12) existing bore wells only and 18,47,225 cu.m/year through dewatering of mine seepage on account of mining intersecting the water table during the mining operation. The total withdrawal from bore wells and dewatering shall not exceed 19,58,550 m3/year. No additional ground water abstraction structures shall be constructed for this purpose without prior approval of the CGWA.

2. All the wells shall be fitted with digital water flow meters and monthly ground water abstraction data of each well shall be recorded in a log book by the firm.

3. M/s Ambuja Cements Ltd., shall continue to implement ground water recharge measures to the tune of 5,30,188 m³/year for augmenting the ground water resources of the area. Firm shall also undertake periodic maintenance of recharge structures at its own cost.

4. The firm shall continue to execute monthly ground water level monitoring in the project area through two (2) nos. of existing piezometers. The firm shall install digital water level recorders in both the existing piezometers. Firm shall install telemetry system in one of the piezometers and share user ID and password of the telemetry system with the Regional Director, Central Ground Water Board, North Central Chhattisgarh Region, Raipur.

5. The ground water quality shall be monitored once in a year during pre

monsoon period.

6 The ground water monitoring data in respect of S. No. 2, 4, & 5 shall be submitted to the Regional Director, Central Ground Water Board, North Central Chhattisgarh Region, Raipur on regular basis at least once in a year.

7. The firm shall ensure proper recycling and reuse of waste water after

adequate treatment.

8. The firm shall submit report on impact of ground water abstraction on the ambient ground water regime within six months of the renewal of NOC.

9. Action taken report in respect of S.N o. 1 to 8 shall be submitted to CGWA

within one year period.

10. The NOC is liable to be cancelled in case of non-compliance of any of the conditions as mentioned in S. No. 1 to 9.

11. The project proponent shall take all necessary measures to prevent contamination of groundwater in the premises failing which the firm shall be

responsible for any consequences arising there upon.

12. This NOC is subject to prevailing Central/State Government rules/laws or Court orders related to construction of tubewell/ground withdrawal/construction of recharge or conservation structures/discharge of effluents or any such matter as applicable.

13. This NOC does not absolve the applicant / proponent of his obligation / requirement to obtain other statutory and administrative clearances from other

statutory and administrative authorities.

14. The NOC does not imply that other statutory / administrative clearances shall be granted to the project by the concerned authorities. Such authorities would consider the project on merits and be taking decisions independently of the NOC.

Member (CGWA)

Copy to:

1. The Member Secretary, Chhattisgarh Environment Conservation Board, Paryavas Bhavan, North Block Sector-19, Naya Raipur, Chhattisgarh.

2. The District Collector & Magistrate, District Balodabazar, Chhattisgarh for

necessary action.

3. The Director, Ministry of Environment & Forests, Paryavaran Bhawan, CGO

Complex, Lodhi Road, New Delhi-110003

4. The Regional Director, Central Ground Water Board, North Central Chhattisgarh Region, Raipur. This has reference to your recommendation dated 17/06/2019.

Guard File 2019-20

24/-Member (CGWA)

Annexure VIII

Road Water Sprinklers







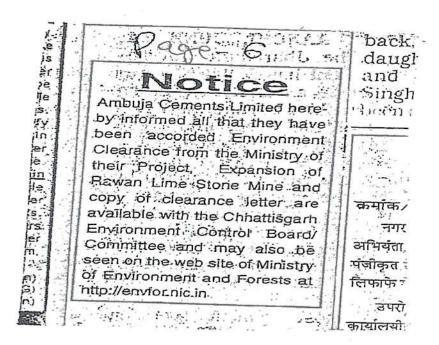
Annexure IX

List of Environmental Expenditureincurred existing for the Environmental Protection (Cost in Lacs.) of Rawan Mine October 2023- March 2024

Sr. No	Particulars	(Cost in Lacs.)
1	Water Sprinkling on Haul road- 28 KL Water Tanker	15.00
2	Bag filter Installation	1.00
3	Dust Suppression and Sprinkler System on Limestone hopper and Conveyor	1.25
4	Rainwater Harvesting Structures with Garland Drains	2.50
5	Green Belt Development	1.25
6	Environmental Monitoring	12.2
Total	•	33.2

Annexure-X

Costral Chronicle, Raipur dated 15.06.07



ELS A 24 SLABBL. LEGILA 72.06.5005

अम्बुका सीमेंद्स लिमिटेड, एतद द्वारा सभी को सुनित करता है कि उनके परियोजना (स्वान खदान विस्तार) हेतु मंत्रालय से पर्यावरण क्लीबरेंस मिल गया है, जिसकी काणी छत्तीसगढ़ पर्यावरण नियंत्रण मण्डल/कमेटी के पास उपलब्ध हैं, जिसे पर्यावरण एवं जन मंत्रालय के के वेव साइट http://envfor