Ambuja Cement

Ref: ACL/BYT/ENV/2020-21/84 **Date: 18.05.2020**

To,
The Additional Principal Chief Conservator of Forests
Ministry of Environment, Forest & Climate Change
Regional Office (West Central Zone), Ground Floor, East Wing
New Secretary Building, Civil Lines, Nagpur-440001.

Sub: Submission of Half Yearly Environment Clearance Compliance Report along with Environmental Monitoring Report for the period **October-2019 to March-2020** for Rawan Limestone Mines.

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

Dear Sir,

Please find the enclosed herewith the six monthly Environment Clearance compliance report along with Monthly Environmental Monitoring report from **October-2019 to March-2020,** 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)

Pankaj Lochan
Manufctring Cluster Head (East)

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

Copy to:

1. **Central Pollution Control Board**, Zonal Office, Sahkar Bhawan, North T.T. Nagar, Bhopal -462003.
2. The Member Secretary , **Chhattisgarh Environment Conservation Board**, Paryavas Bhavan, North Block Sector-19, Atal Nagar (C.G.) 490099.
3. The Regional Officer, CECB, Kabir Nagar Commercial Complex ,**Chhattisgarh Housing Board Colony**, Kabir Nagar, Raipur (C.G.)

Environment Clearance Compliance Report
For
(October-2019 to March-2020)

of

Rawan Limestone Mine
(Capacity: 6.31 MTPA, ML Area: 420.95 Ha.)
at
P.O. Rawan, Tehsil-Baloda Bazar,
District-Baloda Bazar- Bhatapara, Chhattisgarh

M/s AMBUJA CEMENTS LTD.
(Unit: Bhatapara)
P.O.: Rawan, Dist.: Baloda Bazar - Bhatapara
Chhattisgarh - 493331, India

Compliance Status of Environmental Clearance Conditions accorded by MoEFCC 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), Date: 8th June 2007

Sr. No.	EC Conditions	Compliance Status
	A. Specific Conditions	
i.	Top soil shall be stacked properly with proper slope with adequate safeguards and shall be backfilled for reclamation and rehabilitation of mined out area.	Being complied. Top soil is stacked separately and utilizating for reclamation and rehabilitation of mined out area and green belt development.
ii.	Over burden shall be stacked at earmarked dump 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.	Being complied. 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, Nagpur. Last compliance report was submitted via mail dated Nov.-16, 2019 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	Complied. Garland drains are constructed around the dumps to arrest silt and sediment flows. The drains are connected to a settling tank and/or mine pits and accumulated water is being used for dust suppression, plantation etc. De-silting of garland drains is carried out at

Sr. No.	EC Conditions	Compliance Status
	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.	regular intervals. Photograph is enclosed as **Annexure-II.**
iv.	Controlled drilling and blasting shall be done by using dust extractors/wet drilling.	Complied Controlled blasting using delay detonators are being practiced. Drilling is carried out with drill machines equipped with dust arrestors. 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.	Being complied. 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 density of plantation is maintained at around 2500 plants per ha.
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.	Complied. Conservation measures to augment ground water resources in the mine area in consultation with the Regional Director, Central Ground Water Board. Rainwater accumulates in the mines pit percolate to the ground thereby recharging the ground water table, Photographs enclosed **Annexure V**.
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,	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**

Sr. No.	EC Conditions	Compliance Status
	Central Ground Water Authority and Regional Director Central Ground Water Board.	
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. Vehicles transporting minerals within the mine lease are covered with tarpaulin and overloading is strictly prohibited.
x.	A final mine closure plan, along with details of corpus fund, shall be submitted to the Ministry Of Environment & Forests 5 years in advance of final mine closure for approval.	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.
B. General Conditions		
i.	No change in mining technology and scope of working shall be made without prior approval of the Ministry Of Environment & Forests.	Noted and Complied No change in mining technology and scope of working will be made without prior approval of MoEFCC.
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

Sr. No.	EC Conditions	Compliance Status
		Consultant Forest and Environment copy of Certificate is enclosed as **Annexure-IV&VIII.**
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 Six 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 M/s SMS Envocare Ltd., Nagpur. Monitoring report is enclosed as **Annexure-IX.**
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.	Complied Four CAAQMS installer and its connectivity given to CPCB and CECB. Ambient air quality is regularly monitored by NABL accredited Lab M/s SMS Envocre Ltd. and reports are submitted to Regional office of MoEFCC, CECB & CPCB. The air quality monitoring report for the period Oct. 2019 to March-2020 is given in **Annexure-IX.**
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.	Complied 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-X**
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-XI .**

Sr. No.	EC Conditions	Compliance Status
viii.	Industrial waste water (workshop and waste water 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- XII.**
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. **Annexure-XIII**
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 Dy. 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
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.	Noted & being complied.
xiv	The project authorities hall 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-XIV**

Sr. No.	EC Conditions	Compliance Status
5.	The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environmental protection.	Noted.
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 Environment (Protection) Act, 1986.	Noted.
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 (Protection) Act, 1986. Hazardous Wastes(Management and Handling) Rules, 2003 and the Public (insurance) Liability Act, 1991 along with their amendments and rules.	Noted

****

Sanjay Kumar YADAVA <sanjay.yadava@ambujacement.com>

Reg. Submission of Half Yearly EC Compliance Report along with Environmental Monitoring Report for the period April to Sept-2019 for Rawan Limestone Mine.

1 message

Sanjay Kumar YADAVA <sanjay.yadava@ambujacement.com> Sat, Nov 16, 2019 at 4:37 PM
To: apccfcentral-ngp-mef@gov.in, CPCB RD Bhopal <cpcb.bhopal@gmail.com>, Head Office CECB <hocecb@gmail.com>, Regional Officer <rocecbraipur2014@gmail.com>, eccompliance-cg@gov.in
Cc: Bhavin Kumar SUTHAR <bhavinkumar.suthar@ambujacement.com>, Pandurang GIRAME <pandurang.girame@ambujacement.com>, Nitesh RAGHUVANSHI <nitesh.raghuvanshi@ambujacement.com>, Subbaraidu AYYAGARI <subbaraidu.ayyagari@ambujacement.com>, G V Rama Krishna <gv.ramakrishna@ambujacement.com>

Dear Sir/Madam

Please find the enclosed herewith the Six monthly Environment Clearance Compliance Report of stipulated conditions along with Monthly Environmental Monitoring Report (**April To Sept.-2019**) for conditions stipulated the Environmental clearances, **Rawan Limestone Mine**.

This is for your kind information and record.

Thanks & Regards
Sanjay Yadav
Environment Dept.
Ambuja Cements Ltd.
Unit - Bhatapara,
Dist: Baloda BazaBhatapara,Chhattisgarh
Mobile - 8982073666
sanjay.yadava@ambujacement.com
www.ambujacement.com

Ambuja Cement Ltd Rawan limestone Mine, Bhatapara EC compliance April to Sept.19.pdf
1563K

Annexure-I

Garland Drain and Slope Stability in Dump

Annexure-III

DRILLING MACHINE

Annexure-IV

Year wise Plantation

PLANTED YEAR	MINES (ML)			
	Planted	Sur.	Sur%	Hect
1984-85	2000	1500	75	0.6
1985-86	4000	3360	84	1.34
1986-87	4450	3026	68	1.21
1987-88	5000	3500	70	1.4
1988-89	3800	2280	60	0.91
1989-90	3450	2139	62	0.85
1990-91	2470	1950	79	0.78
1991-92	2490	1494	60	0.59
1992-93	2260	1379	61	0.55
1993-94	3500	2214	63	0.88
1994-95	2090	1541	74	0.61
1995-96	2000	1800	90	0.72
1996-97	1200	907	76	0.83
1997-98	1100	930	85	0.83
1998-99	1200	935	78	0.37
1999-00	1175	968	82	0.38
2000-01	1240	918	74	0.36
2001-02	1000	935	93	0.84
2002-03	2000	1477	74	1.8
2003-04	7000	6726	96	2.69
2004-05	6000	5800	97	2.32
2005-06	5430	4270	79	1.7
2006-07	6000	4920	82	1.96
2007-08	4110	3404	83	1.36
2008-09	4000	3402	85	1.36
2009-10	5800	5336	92	2.13
2010-11	8500	7933	93	2.1
2011-12	2230	1566	70	0.62
2012-13	1000	770	77	0.33
2013-14	5600	4000	71	1.86
2014-15	6106	4310	70	1.72
2015-16	3523	3227	78	0.22
2016-17	5290	3880	73	2.11
2017-18	1500	1237	82	1
2018-19	2369	1700	92	1
2019-20	1500			
TOTAL	**122383**	**95734**		**27.12**

S.No.	Common name	Botanical name	S.No.	Common name	Botanical name
1	African Tulip Tree	Spathodea Campanulata	36	Khair	Senegalia catechu
2	Alstonia (Chatim)	Alstonia scholaris	37	Karanj	Pongamia Glabra
3	Amaltas	Cassia fistula spp.	38	Karounda	Carissa carandus
4	Anar	Punica granatum	39	Kathal (Jack Fruit)	Artocarpus Heterophyllus
5	Arjuna	Terminalia arjuna	40	Kaner (Oleander & Nerium)	Theveatia Peruviana
6	Ashok Tree	Polyalthia longifolia	41	Khamhar	Gemelina arborea
7	Australian Accasia	Acasia Auriculiformis	42	Mango	Mangifera indica
8	Anola	Embbica Officinalis	43	Mahua	Madhuca longifolia
9	Babul desi	Acacia nilotica	44	Maharukh (Mhaneem)	Ailanthus excelsa
10	Bel	Aegle marmelos	45	Musambi	Citrus sinensis
11	Bair	Ziziphus jujubai	46	Munga (Drum Stick)	Moringa oleifera
12	Bakayan	Melia azedarach	47	Mudhi	Mitragyna parvifolia
13	Babmboo	Phyllostachys	48	Neebu	Citrus limon Burma
14	Bargad (Banyan Tree)	Ficus Bengalensi	49	Neel Giri (Safeda)	Eucalyptus
15	Bottel brush (Scarlet)	Callistemon Citrinus	50	Neem	Azadirachta Indica
16	Bohar tree	Cordia myxa	51	Pelto Phorum	Peltophorum enerme
17	Cassia Saimea (Chakundi)	Cassia saimea	52	Palash (Dhak)	Butea frandosa
18	Casurina	Casurina indica	53	Palm tree (Bottel palm)	Palm tree
19	Chakotra	Achras zapota	54	Pangara	Earythrena indica
20	Chikoo (Sapota)	Achras Sapota	55	Putranjeeva (Luck Bean Tree)	Putrangiva roxburghi
21	Champa	Michelia champaka	56	Pipal	Ficus Religiosa
22	Coral plant	Tecoma gudichauri	57	Samal tree (Semhra)	Bombax ceiba
23	Coconut	Cocos nucifera	58	Seetaphal	Annona cherimola
24	Dhanbahar	Cassia festula	59	Siris	Albizia Labeck
25	Desi Badam	Terminalia catappa	60	Shahtut (Mulberry)	Morus Alba / Nigra
26	Guava	Psidium guajava	61	Sisoo	Dalbergia Sisoo
27	Gul Mohar	Delonix regia	62	Subabool	Leucena Leucocehalla
28	Gliricidia	Gliricidia Masculata	63	Saja	Terminalia tomentosa
29	Gandhraj	Gardenia	64	Sagon (Teak)	Tectona Grandis
30	Gangaemli	Pithecellobium dulce	65	Safed siras(Karhi)	Albizzia procera, benth
31	Gular (Dumar)	Ficus racemosa	66	Tikoma	Dhobi podha
32	Imli	Temredus indica	67	Vilayati kiker	Prosopis juliflora
33	Jamun	Ujinia jaimbolana	68	White semal (Kpok Tree)	Ceiba pentandra
34	Kachanar	Bauhinia variegata	69	Laxmi taru	Simarouba glauca
35	kadamba	Anthocepholus kadamba			

PLANTATION PHOTOGRAPHS

Annexure-

CONSERVATION MEASURES TO AUGMENT GROUND WATER - V

Annexure-VI

AMBUJA CEMENTS LIMITED, UNIT: BHATAPARA

RAWAN LIMESTONE MINES

GROUND WATER MONITORING REPORT

FOR THE QUARTER ENDING MARCH-2020 (FROM January -2020 TO March -2020)

STATION NO.	NAME OF VILLAGE& CITY	Water level January -20	Water level February-20	Water level March-20
1	Khamariya	7.98	7.09	5.81
2	Topa	6.03	5.36	4.56
3	Arjuni	7.23	4.71	5.1
4	Maldi	7.01	6.28	5.2
5	Devrani	5.12	3.66	1.63
6	Mopar	8.33	5.96	4.9
7	Rawan	7.38	6.71	5.45
8	Karmada	8.68	5.73	4.33
9	Pausari	8.43	7.96	7.23
10	Chhuiha	5.94	3.41	0.8
11	Baloda Bazar	9.09	8.28	7.8
12	Latua	7.73	4.44	2.43
13	Dhabadih	8.41	6.13	4.98
14	Magarchaba	6.93	4.09	2.09
15	Amera	6.72	3.43	2.35
16	Risda	6.28	4.09	2.78
17	Champa	7.15	5.43	4.35
18	Semaradih	8.3	7.99	7.3
19	Chandih	8.1	4	2.7
20	Khelwari	8.5	8.78	7.91
21	Kukurdih	7.6	7.68	6.18

AMBUJA CEMENTS LIMITED (UNIT-BHATAPARA)

RAWAN LIMESTONE MINES

Piezometer Data (Core Zone) Unit in M (bgl)

From January -2020 to March -2020

Area	Station Name	January 2019	February 2019	March 2019
ML AREA	TP-1	10.6	10.2	11.6
Plant	TP-2	5.53	6.58	7.6
Bhadrapali Pond	TP-3	3.69	4.8	5.1

16/4/2020

Bhavin Kumar Suthar
Manager (Mines)

Annexure-VII

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

No.21-4(117)/NCCR/CGWA/2011- 762 **Dated:-** 05 SEP 2019

To

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, Pausari and Bharseli, Block &Tehsil Balodabazar ,District 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

Annexure-VIII

Certificate

This is to certify that M/s Ambuja Cements Limited was inspected on 14 June 2016. It was found that plantation of trees in its Plant and Mines area as well as along State Roads is as per guidelines issued by Chhattisgarh Environment Conservation Board, Raipur, and Ministry of Environment and Forests. The required area is covered with variety of tress with safety and protection measures well in place. The salient features observed during the course of inspection are as follows.

1. 79.65 Hectares is covered with Green Belt out of 238.97 Hectare area in the plant premises which is more than 33% of Plant Area.

2. 36.2 Hectares is covered with Green Belt in Mines.

3. Over 30,000 saplings of Neem, Shisham, Jamun, Kadam, Karanj etc have been planted along Baloda Bazar – Bhatapara road as also around several villages, notably Bharseli and Kukurdi in the years 2014 and 2015. The survival percentage for the mentioned plantation is over 90%.

Place: Raipur

Date: 28-06-2016

(C. M. Shakeel)

C.M. SHAKEEL
Consultant
Forests & Environment
Raipur (C.G.)

BIODIVERSITY ACTION PLAN BHATAPARA

1. **Introduction:** Biological diversity or "biodiversity" has been defined as: "The variability among living organisms from all sources including Inter alia and Terrestrial other Aquatic Ecosystems and the Ecological Complexes of which they are part; this includes diversity within species, between species, and of Ecosystems". Chhattisgarh State, lying in the Vindhyan hill regions and Deccan plateau in central India, has over 44% of its land area under forests and is rich in biodiversity. 7.8 Million indigenous and tribal communities eke out their livelihood from these forests and biological resources. Diversity within species (or genetic diversity) refers to variability in the functional units of heredity present in any material of plant, animal, microbial or other origin. Species diversity is used to describe the variety of Ecosystem diversity refers to the enormous variety of plant, animal and micro organism communities and ecological processes that make them function. This variety provides the building blocks to adapt to changing environmental conditions in the future. Ambuja Cement Ltd. Unit Bhatapara, Chhattisgarh, set up cement plant, Environment Clearance granted by MOEFCC, New Delhi as given in the table:

Sr.No.	EC No.	Purpose	Date issued	Area (Ha.)
1	J-11011/72/2009-IA-II(I)	Amendment in EC of Cement capacity from 1.8 MTPA to 2.9MTPA to 3.5MTPA	13.05.2011	238.97
2	J-11011/330/2006-IA-II(I)	Rawan Lime Stone Mines from 2.06MTPA to 6.31 MTPA	08.06.2007	420.95
3	J-11015/252/2008-IA-II(I)	2.0 MTPA Maldi Mopar Mines	13.08.2010	553.656

2. **Objective:**

   a. Action plan for Conservation of biodiversity

   b. Study of biodiversity

   c. BIR assessment in 2019

BIRS assessment carried out in Dec, 2017 resulted in a baseline score (Site Biodiversity Index) of 1.7 at Bhatapara. Through implementation of BAP activities, location team will strive to make a positive change on Biodiversity (reflected in a higher score) which will periodically assessed every two year (due in 2019) through BIRS. All concerned functions/departments will act in a co-ordinated manner to achieve the goal to make a positive change on biodiversity.

3. Study Area:

Satellite Image of Mines

4. Climate and Rainfall: The climate of Chhattisgarh is tropical. It is hot and humid because of its proximity to the Tropic of Cancer and its dependence on the monsoons for rains. Bhatapara's climate is also classified as tropical. The summers here have a good deal of rainfall, while the winters have very little. The climate here is classified as Aw by the Koppen-Geiger system. In Bhatapara, the average annual temperature is 26.9 °C. The average annual rain fall in the area is 1094 mm with approximate 65 rainy days. Summer temperatures can reach 45°C(113 °F). The monsoon season is from late June to October. Winter is from November to January. Winters are pleasant with low temperatures (13^0 C) and less humidity.

5. Action Plan: Biodiversity action plan at Bhatapara is based on the above studies and approvals. Action points are drawn from the two conservation plans. Additional action points are added in the list of activities wherein ACF attempts to conserve biodiversity of area through different internal activities through ACF, Mining department and Environment department as well as contributing to government and Non-Government efforts towards conservation. ACL will look for opportunities to join hands with Government and Non-Government organizations for identifying and implementing some actions on voluntary basis. BAP will be reviewed from time to time through internal and external consultations to make this plan more robust. BAP has been prepared with special focus on protection of existing habitat within and outside the Sanctuary and rehabilitation / improvement of surrounding areas and degraded habitats with a view to ensure the Biodiversity in the vicinity of the project site (plant and mine). Local community is an important stakeholder and potential driver of conservation efforts are being considered by ACL for long term success. There is good scope for ACF to rope in community help in implementation of BAP through formation of Self-Help Groups and other such activities. ACF has commitment in community involvement (major stakeholder) and protection of environment is obviously discernible given the fact that it has been engaged in organizing the poor women in to Self-Help Groups in and around the project sites. Self Help Groups mean any organized group of persons who are collectively by mutual help are able to enhance their economic status through resource based activities. Formation and strengthening of SHG shall provide an opportunity to these stakeholders to enhance their income and also reduce their dependence on natural resource base to some extent. Awareness creation on biodiversity conservation for community and ACL workforce shall also be intensified

Butterfly Park Project, Fruit bearing Species Post Plantation care, water arrangement, Fire Management to prevent any fire on forest habitat, Fencing to the Lease boundary to prevent animal and human encroachment, Aquatic Plant development/marsh grasses planted around the edge of a pond, Artificial Birds nesting Project, Water features on Quarry slope, Tree Transplantation Proposal, Strengthening of existing self-help groups of rural poor and women and formation of New SHG, Implementation of income generation program to address the livelihood needs of the local people through income generation activities based on micro plans. Providing energy saving devices, Immunization of livestock to control spread of disease in local community, Capacity building of wild life staff and local communities through competence based training, Minimize soil erosion through water harvesting structure in local community.

Ambuja Cements Ltd. Six Monthly Ambient Air Monitoring Report (October -2019 to March-2020)

Ambient Air Monitoring Report of month October-2019

Monitoring Station	PM_{10} (100µg/m^3)	$PM_{2.5}$ (60 µg/m^3)	SO_2 (80 µg/m^3)	NOx (80 µg/m^3)	CO (mg/m^3)
Water Treatment Plant (WTP)	63-79.8	33.5-38.7	9.97-12.7	21.7-25.1	0.22-0.32
Rawan Mines Office	64.4-74.5	31.8-40	8.79-11.4	21.2-24.6	0.20-0.25
Maldi Mines Office	64.5-75.5	31.6-38.8	8.38-11.6	20.6-24.4	0.18-0.24
Rawan	58.4	26.3	7.97	10.5	0.12
Risda	62.4	24.5	8.94	13.8	0.16
ACL Colony	55.5	20.8	6.52	9.05	0.1
Dhabadih	58.5	20.8	7.8	10.9	0.11
Maldi	55.7	22.1	7.53	10.3	0.12
Chuiha	57.3	22.6	7.31	10.6	0.12
Dhandhani	58.5	21.5	6.77	10.2	0.1

Ambient Air Monitoring Report of month –November-2019

Monitoring Station	PM_{10} (100µg/m^3)	$PM_{2.5}$ (60 µg/m^3)	SO_2 (80 µg/m^3)	NOx (80 µg/m^3)	CO (mg/m^3)
WTP	77.3-92.4	38.5-52.7	11.3-12.3	23.2-25.8	0.24-0.29
Rawan Mines Office	69.3-79.6	34.9-46	9.34-11.3	20.8-23.9	0.19-0.26
Maldi Mines Office	68.3-82.9	36-48.4	8.98-12.3	20.4-24.4	0.2-0.28
Rawan	64.2	31.5	9.42	10.7	0.18
Risda	66.2	35.3	8.94	13.9	0.22
ACL Colony	61.3	30	6.71	11.3	0.14
Dhabadih	69.1	35	11.6	14.3	0.24
Maldi	65.3	33.8	9.55	13.6	0.22
Chuiha	60	27.4	7.92	12.5	0.14
Dhandhani	67.2	35.9	8.36	14.3	0.25

Ambient Air Monitoring Report of month –December-2019

Monitoring Station	PM_{10} (100µg/m^3)	$PM_{2.5}$ (60 µg/m^3)	SO_2 (80 µg/m^3)	NOx (80 µg/m^3)	CO (mg/m^3)
Water Treatment Plant	84.6-96.6	44.6-53.1	12.5-13.6	26.8-28.9	0.26-0.31
Rawan Mines Office	78.6-88.1	34.7-45.9	9.38-10.6	23.7-26.3	0.22-0.29
Maldi Mines Office	74-87.4	40.2-49.5	10.2-13.7	23.5-29.8	0.2-0.28
Rawan	77.2	44.4	12.4	16.9	0.26
Risda	65.8	32.5	10.4	20.1	0.24
ACL Colony	63.4	32.8	7.33	18.5	0.16
Dhabadih	79.3	48.5	14.1	23.4	0.3
Maldi	80.9	47.5	15.8	24.6	0.29
Chuiha	68.8	36.9	10.5	19.8	0.18
Dhandhani	67.7	33.2	11.6	21.7	0.19

Ambient Air Monitoring Report of month –January-2020

Monitoring Station	PM_{10} (100µg/m^3)	$PM_{2.5}$ (60 µg/m^3)	SO_2 (80 µg/m^3)	NOx (80 µg/m^3)	CO (mg/m^3)
WTP	84.1-89.2	38.9-44.1	10.3-14.5	24.4-31.8	0.18-0.28
Rawan Mines Office	80.2-89.7	39.9-45.2	9.9-11.6	19.1-24.3	0.18-0.24
Maldi Mines Office	70.4-81.9	40.5-45.7	11.6-13.5	22.8-25.6	0.15-0.24
Rawan	62.2	23.4	14.8	26.2	0.45
Risda	54.23	21.4	9.1	23.8	0.32
ACL Colony	57	24.5	8.04	21.4	0.15
Dhabadih	54.3	29.1	12.03	23.9	0.14
Maldi	54.1	17.6	12	22.1	0.35
Chuiha	68.2	26.5	12	23.4	0.08
Dhandhani	62.4	27.5	12.3	23.4	0.24

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Annexure-IX

Ambient Air Monitoring Report of month –February-2020

Monitoring Station	PM_{10} (100µg /m^3)	$PM_{2.5}$ (60 µg/m^3)	SO_2 (80 µg/m^3)	NOx (80 µg/m^3)	CO (mg/m^3)
Water Treatment Plant	60.1-74.4	22.4-29.7	7.9-11.1	14.7-20.5	0.19-0.31
Rawan Mines Office	54.1-60.5	18.5-22.5	10.1-14.6	17-24.6	0.18-0.27
Maldi Mines Office	61.1-69.5	20.3-27.9	7.2-12.7	18.6-24.8	0.21-0.31
Rawan	65.1	20.6	8.3	21.6	0.42
Risda	72.7	22.6	13.5	23.4	0.4
ACL Colony	64.1	19.3	8.4	16.4	0.28
Dhabadih	72.7	24.6	10.8	17.7	0.28
Maldi	67.4	28.6	14.1	26.5	0.39
Chuiha	61.3	20.7	7.03	17.9	0.35
Dhandhani	63.9	27.6	12.4	24.5	0.4

Ambient Air Monitoring Report of month –March-2020

Monitoring Station	PM_{10} (100µg/m^3)	$PM_{2.5}$ (60 µg/m^3)	SO_2 (80 µg/m^3)	NOx (80 µg/m^3)	CO (mg/m^3)
Near Railway Siding	71.1-74.2	24-27.2	8.8-10	16.1-19.8	0.19-0.24
Rawan Mines Office	58.9-64.1	17.8-20.8	11.3-12	18.7-22.1	0.24-0.32
Maldi Mines Office	67.5-70.3	21.7-24.1	8.1-10.1	18.8-20.6	0.24-0.34
Rawan	66.8	22.1	10.4	19.6	0.45
Risda	70.1	24.2	12	21.8	0.44
TPP area	60.4	21.9	8.5	14.5	0.28
Dhabadih	70.1	22.9	10.5	16.3	0.3
Maldi	65.4	25.5	12.8	24.8	0.42
AFR office	60.2	16.7	9	14.5	0.22
Dhandhani	64.5	25.9	11	22.4	0.36

Water sprinklers

Annexure-X

Annexure-XI

M/s Ambuja Cements Ltd. Six Monthly Ambient Noise Level Report of Month October -2019 to March-2020							
S.No.	MONTH	October-19		November-2019		December-19	
	Location	Noise Level (dB)		Noise Level (dB)		Noise Level (dB)	
		Day Time Leq.	Night Time Leq.	Day Time Leq.	Night Time Leq.	Day Time Leq.	Night Time Leq.
1	ACL Colony	53.4	44.3	52	42.5	51.9	42.7
2	Near Old CCR Building	56.3	53.6	57.4	53.4	58.1	52.6
3	Near Admin office	56.5	52.3	55.7	50.5	54.8	50.4
4	Maldi Mopar Mines Field Office	54.5	46.6	51.3	49.7	51.6	49.8
5	Rawan Mines South Block area	54.7	44.2	57.2	47.9	57.5	47.6
6	Rawan Mines North Block area	62.2	45.7	60.4	48.2	61.4	48.5
7	Rawan Mines Office	63.6	46.8	61.8	50.1	62.3	49.2
8	Main office	53.3	50.9	57.3	52.8	57.4	51.6
9	Maldi Mopar Mines Haulege Road	54.7	46.3	51.5	48.8	52.6	47.6
10	TPP area	61.8	62.5	69.6	65.6	68.6	64.9
11	New CCR Building	63.2	55.8	62.5	60.3	61.7	59.5
12	Security check post Rail Yard	61.2	56.4	60.9	58.8	60.7	57.6

S.No.	MONTH	January-20		February-20		March-20	
	Location	Noise Level (dB)		Noise Level (dB)		Noise Level (dB)	
		Day Time Leq.	Night Time Leq.	Day Time Leq.	Night Time Leq.	Day Time Leq.	Night Time Leq.
1	Maldi Mopar Mines Field Office	54.8	49.2	54.1	41.3	55.8	40.2
2	Rawan Mines South Block area	52.8	48.1	61.9	55.8	66.9	54.1
3	Rawan Mines North Block area	57.4	46.7	63.5	54.6	65.6	53.2
4	Main office	64.5	50.2	66.2	59.9	66.4	57.6
5	Maldi Mopar Mines Haulege Road	52	46.5	52.7	43.6	56.2	41.8
6	TPP area	65.6	63.8	72.4	68.9	70.5	64.2
7	New CCR Building	54.2	45.1	73.6	68.2	72.5	62.1
8	AFR office	56.1	51.6	72.1	64.2	74.1	61
9	Village Risda	36.5	29.1	45.3	35.2	46.7	32.6
10	Village Rawan	38.6	32.4	53.9	39.5	56.7	35.6
11	Village Maldi	35.14	27.6	41.1	32.4	42.5	30.5
12	Village Dhandhani	36.1	30.7	43.2	28.3	46.7	27.8
13	Village Dhabadih	35.67	28.3	41.5	34.2	42.9	31.2

Annexure- XII

M/s Ambuja Cements Ltd. Six Monthly Washing way water Report of Month October -2019 to March-2020

	MONTH	October-19					November-19					December-19				
S. No.	Test Parameters / Location	pH	COD (mg/l)	BOD (mg/l	Oil & Grease (mg/l)	SS (mg/l)	pH	COD (mg/l)	BOD (mg/l	Oil & Grease (mg/l)	SS (mg/l)	pH	COD (mg/l)	BOD (mg/l	Oil & Grease (mg/l)	SS (mg/l)
1	Mines Work Shop (treated)	7.57	92	11.5	0.2	28	8.28	136	18	0.2	2	6.73	130.9	9.5	0.2	24

	MONTH	January-20					February-20					March-20				
S. No.	Test Parameters / Location	pH	COD (mg/l)	BOD (mg/l	Oil & Grease (mg/l)	SS (mg/l)	pH	COD (mg/l)	BOD (mg/l	Oil & Grease (mg/l)	SS (mg/l)	pH	COD (mg/l)	BOD (mg/l	Oil & Grease (mg/l)	SS (mg/l)
1	Mines Work Shop (treated)	7.94	28	3	1	4	7.56	16	3	0.2	4	7.62	20	<3	0.1	<4

TRANING ATTENDANCE SHEET

Course Name : Fire Safety Training
Trainer Name : Mayank Jain
Location : New CCR Training Hall
Designation/ Trade :
Date : 30.12.19

Duration :- 02 Hrs.

Sr. No.	Name	Department	Employee Code	Sign
1	B Rama Mani	Occupational Health Centre	2010033	
2	Madhukar Pandey	Production	2010098	
3	Rajeev Kumar Dwivedi	Production	2010132	
4	Sanjay Kumar Yadava	Environment	2010135	
5	Sujoy Mukherjee	E & I Maintenance	2010164	
6	Tarun Gupta	E & I Maintenance	2010170	
7	Anish Kumar Mitra	Mechanical Maintenance	2010163	
8	Ashima Singh	Mechanical Maintenance	2010174	
9	Neeraj Singh	Mines	2010176	
10	Utkarsh Tripathi	Mines	2010180	
11	Prateek Sharma	Mines	2010184	
12	Himanshu Shekhar	Mines	2010205	
13	Daiman Giri Goswami	Production	2010229	
14	Devesh Raaj Panjiray	Performance Support Center	2010265	
15	Abdul Raees	Mines	2010373	
16	Balendra Prasad Sen	Mines	2010380	
17	Vijay Victor	Mines	2010438	
18	Udaylal Namdev	Production	2010516	
19	Rajesh Mahapatra	Sales And Distribution	2010546	
20	Sudeep Lashkar	Preventive Maintenance	2010556	
21	Nitesh Raghuvanshi	Mines	2010561	
22	Anoop Tiwari	E & I Maintenance	2010654	
23	Sheeba Khan	Mechanical Maintenance	2010661	
24	Abhishek Verma	Mechanical Maintenance	2010659	
25	Jatin Kumar	Mechanical Maintenance	2010666	
26	Ashutosh Tiwari	Mechanical Maintenance	2010663	
27	Vikash Kumar	Mechanical Maintenance	2010664	
28	Tej Pratap Singh	Mechanical Maintenance	2010656	
29	Sumit Kumar	Production	2010672	
30	Paramvir Vashisht	Production	2010673	

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TRANING ATTENDANCE SHEET

Course Name : HIRA
Trainer Name : Amit Kumar
Location : New CCR Training Hall
Designation/ Trade :
Date : 30/12/15. Duration :- 02 Hrs.

Sr. No.	Name	Department	Employee Code	Sign
1	B Rama Mani	Occupational Health Centre	2010033	
2	Madhukar Pandey	Production	2010098	
3	Rajeev Kumar Dwivedi	Production	2010132	
4	Sanjay Kumar Yadava	Environment	2010135	
5	Sujoy Mukherjee	E & I Maintenance	2010164	
6	Tarun Gupta	E & I Maintenance	2010170	
7	Anish Kumar Mitra	Mechanical Maintenance	2010163	
8	Ashima Singh	Mechanical Maintenance	2010174	
9	Neeraj Singh	Mines	2010176	
10	Utkarsh Tripathi	Mines	2010180	
11	Prateek Sharma	Mines	2010184	
12	Himanshu Shekhar	Mines	2010205	
13	Daiman Giri Goswami	Production	2010229	
14	Devesh Raaj Panjiray	Performance Support Center	2010265	
15	Abdul Raees	Mines	2010373	
16	Balendra Prasad Sen	Mines	2010380	
17	Vijay Victor	Mines	2010438	
18	Udaylal Namdev	Production	2010516	
19	Rajesh Mahapatra	Sales And Distribution	2010546	
20	Sudeep Lashkar	Preventive Maintenance	2010556	
21	Nitesh Raghuvanshi	Mines	2010561	
22	Anoop Tiwari	E & I Maintenance	2010654	
23	Sheeba Khan	Mechanical Maintenance	2010661	
24	Abhishek Verma	Mechanical Maintenance	2010659	
25	Jatin Kumar	Mechanical Maintenance	2010666	
26	Ashutosh Tiwari	Mechanical Maintenance	2010663	
27	Vikash Kumar	Mechanical Maintenance	2010664	
28	Tej Pratap Singh	Mechanical Maintenance	2010656	
29	Sumit Kumar	Production	2010672	
30	Paramvir Vashisht	Production	2010673	

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Annexure- XV

Central Chronicle, Raipur
dated 15.06.07

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Notice

Ambuja Cements Limited here by informed all that they have been accorded Environment Clearance from the Ministry of their Project, Expansion of Rawan Lime Stone Mine and copy of clearance letter are available with the Chhattisgarh Environment Control Board/ Committee and may also be seen on the web site of Ministry of Environment and Forests at http://envfor.nic.in

back
daugh
and
Singh

क्रमांक/
नगर
अभियंता,
पंजीकृत
लिफाफे
उपरो
कार्यालयी

हरिभूमि रायपुर, दिनांक 15.06.2007

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सूचना

अम्बुजा सीमेंट्स लिमिटेड, एतद द्वारा सभी को सूचित करता है कि उनके परियोजना (रवान खदान विस्तार) हेतु मंत्रालय से पर्यावरण क्लीयरेंस मिल गया है, जिसकी कापी छत्तीसगढ़ पर्यावरण नियंत्रण मण्डल/कमेटी के पास उपलब्ध है, जिसे पर्यावरण एवं वन मंत्रालय के वेब साइट http:/ envfor .nic.in पर भी देखा जा सकता है।

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