Ambuja Cement

Registered A/D

ACL/EMD/F-28 **Date: 15/04/2021**

To,

The Director
Ministry of Environment, Forests & Climate Change
Regional Office (Jaipur)
A 209- 218, Aranya Bhawan, Mahatma Gandhi Road,
Jhalana Institutional Area, Jaipur (Rajasthan)

Sub: Half-yearly Condition wise Compliance report of Environmental Clearance for expansion of Integrated Cement Project (Clinker from 2.4 MTPA to 2.9 MTPA), Captive Power Plant (From 33 MW to 53 MW) and new Limestone Mine RAS-I (ML Area:183.53 ha & 0.279 MTPA at Rabriyawas, Tehsil Jaitaran, District Pali in Rajasthan

Ref: F. No. J-11011/54/2010-IA-II (I) dated 29th March' 2012

Dear Sir,

This has reference to the Environmental Clearance Letter No.: - J-11011/54/2010-IA-II (I) dated 29th March' 2012, we are submitting herewith the half-yearly compliance report along with supporting documents for period **October 2020 to March 2021.**

Hope you will find the same in order.

Kindly acknowledge the receipt.

Thanking you,

Yours faithfully
For Ambuja Cements Limited
Unit: Rabriyawas

Arvind Singh
Sr. Manager (Environment)

Encl.: **A/a & Soft copy**

CC: (1) The Zonal Incharge, CPCB, Zonal Office (Central), 3rd Floor, Sahakar Bhawan, North T.T. Nagar, Bhopal, 462 003.

(2) The Member Secretary, RSPCB, 4th, Institutional Area, Jhalana Doongri, Jaipur 302 004

(3) The Regional Officer, SA – 6, Mandia Road Industrial Area, Pali

AMBUJA CEMENTS LIMITED
UNIT – RABRIYAWAS
Works: PO Rabriyawas, Tehsil – Jaitaran, Dist. – Pali (Raj.) 306 709
Tel: 02939 288011-18, Fax: 02939 288030
CIN: L26942GJ1981PLC004717 Website: www.ambujacement.com
(Registered Office: PO – Ambujanagar, Taluka – Kodinar, Dist. – Gir Somnath (Guj.) 362 715)

Half-yearly Condition wise Compliance report of Environmental Clearance for expansion of Integrated Cement Project (Clinker from 2.4 MTPA to 2.9 MTPA), Captive Power Plant (From 33 MW to 53 MW) and new Limestone Mine RAS-I (ML Area:183.53 ha & 0.279 MTPA at Rabriyawas, Tehsil Jaitaran, District Pali in Rajasthan

Period: October 2020 to March 2021

S.N.	Condition	Compliance Status
	A. Specific Conditions:	
i.	Compliance to all the specific and general conditions stipulated for the existing plant by the Central/State Government shall be ensured and regular reports submitted to the Ministry's Regional Office at Lucknow/SPCB.	Noted; Agreed and complied. We are regularly submitting the compliance report of EC letter no. J-11011/189/2006-IA.II(I) dated 31.08.2006 & J-11015/148/2006-IA.II (M) dated 10.10.2007 for our Cement Plant, Captive Power Plant (CPP) & RAS-II Limestone Mines.
ii.	The gaseous and particulate matter emissions from various units shall conform to the standards prescribed by the Rajasthan pollution Control Board. At no time, particulate emissions from the cement plant including Kiln, coal mill, cement mill, cooler and captive power plant (CPP) shall not exceed 50 mg/Nm3	The gaseous and particulate emission from various stack confirmed to the standard prescribed by MoEF&CC vide notification dated 10th May 2016/RSPCB. We ensure that particulate emission from the cement plant including Kiln, Coal mill, Cement mill, Cooler and captive power plant is not exceeding with stipulated emission norms. Stack monitoring report (October 2020 to March 2021) is enclosed herewith as **Annexure-I.**
iii.	Continuous on-line monitors for particulate emissions shall be installed. Interlocking facility shall be provided in the pollution control equipment so that in the event of the pollution control equipment not working, the respective unit(s) is shut down automatically.	Continuous online monitors (Opacity meter) have been installed in all major stacks like Kiln/Raw mill stack, Cooler ESP stack, Coal mill stacks, Cement mill stacks and CPP stack. Online continuous monitoring system has also been installed at Raw mill/Kiln stack to monitor the parameters like Dust, CO, CO2, HCL, SO2, NOx, VOC, NH3, O2, Temperature, Flow etc. Interlocking facilities have also been provided in Pollution Control Equipment so that in event of the pollution control equipment not working, the respective unit(s) is shutdown automatically.
iv.	Data on ambient air quality (PM_{10}, SO_2, NOx) shall be regularly submitted to be Ministry including its Regional office located at Lucknow and the State Pollution Control Board once in six month. Further, quality of discharged water shall also be monitored [(TDS, DO, pH) and total Suspended Solids (TSS)]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the company in public domain.	Ambient Air Quality (PM, SO2, NOx & CO) is being regularly monitored and ambient air quality monitoring reports are being sent on regular basis to Regional Office of MoEF&CC, Lucknow and RSPCB once in six month. Please refer **Annexure-II.** Quality of discharged water is also being monitored (TDS, DO, pH and TSS). The monitored data is being uploaded on the website of Ambuja Cements Limited and displayed in display board near the main gate of the unit. Photographs/reports of the same are being enclosed as **Annexure-III** for your reference.
v.	The Company shall install low NOx burner with Kiln/calciner for control of NOx emissions.	In compliance of MoEF&CC notification dated 10 May 2016, we have installed the low NOx burner with Kiln/Calciner for control of NOx emission in Kiln stack to meet the emission norms. Apart from this, SNCR system is also installed for control of NOx emission.
vi.	Secondary fugitive emissions shall be controlled within the prescribed limits and regularly monitored. Guidelines / Code of Practice issued by the CPCB in this regard shall be followed.	Secondary fugitive emission is being monitored at 10 locations within the plant premises and all the values are well below the prescribed limit. The copies of the latest monitored result are enclosed as **Annexure-IV**. (Monitored value/Green belt/Control Measures) Guidelines /Code of Practice issued by CPCB is being followed.
vii.	The National Ambient Air Quality Emissions Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.	NAAQMS dated 16-11-2009, AAQ for PM10, PM2.5, SO2, NOx & CO is being regularly monitored and the monitored data is regularly submitted to Environment Regulatory Authorities

		within stipulated time. Please refer monitoring report is enclosed as **Annexure-II.**
viii.	Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land. All the raw material including fly ash shall be transported in the closed containers only and shall not be overloaded. Vehicular emissions should be regularly monitored.	Raw material and cement are being transported through trailer of capacity 25-39 Tons rather than conventional small trucks of capacity 09-23 Tons to reduce the no. of trips for transporting the same quantity of Raw material /Cement. This will also reduce the impact of transport on surrounding environment including agriculture land. Finished product is transferred pneumatically from source to storage area. As per company policy, overloaded vehicles are always avoided. Vehicular emissions are being regular monitored for prescribed parameters once in six month. Latest monitoring report (sample copy) is enclosed as **Annexure-V.**
ix.	Fly ash shall be utilized as per the provisions of Fly Ash Notification, 1999, subsequently in 2009. Fly ash shall be stored in ash silo and 100% used in the cement manufacturing.	Fly ash is being generated at CPP and same has been stored in Fly ash Silo. All the generated fly ash i.e. 100% fly ash is being utilised in the cement manufacturing.
x.	The company shall make the efforts to utilize the high calorific hazardous waste in the cement Kiln and necessary provisions shall be made accordingly. The company shall keep the record of the waste utilized and shall submit the details to Ministry's Regional Office at Lucknow, CPCB and SPCB.	We are co-processing high calorific hazardous waste in cement kiln and necessary provisions like storage, transportation, pre-processing etc. are made as per direction/guidelines issued by the environmental regulatory authorities. Different types of hazardous waste having high calorific co-processed in cement kiln. List of all types of hazardous waste co-processed in kiln is enclosed herewith as per Hazardous and Other Waste (Management, Handling & Transboundary) Rules, 2016 is enclosed as **Annexure-VI.**
xi.	Rainwater harvesting measures shall be adopted for the augmentation of ground water at cement plant, colony including check dams at mine site. The company must also collect rain water in mined out pits of captive lime stone mine and use the same water for the various activities of the project to conserve fresh water and reduce the water requirement from the ground water. An action plan shall be submitted to Ministry's Regional Office at Lucknow within 3 months form date of issue of this letter. Efforts should be made to use of rain water harvested. If needed, capacity of the reservoir should be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.	The Rain water harvesting measures like ground water re-charge structures, Rain water storage pond and check dams at RAS-I Mines, RAS-II Mines, Plant area and nearby areas have been developed. Please refer **Annexure-VII**, enclosed herewith. We are also planning to enhance the capacity of the rainwater storage pond in near future to meet the maximum water requirement.
xii.	Total water requirement after expansion shall not exceed 2400 m^3/day. The water stored in the artificial reservoir made in the mine pit shall be used maximum to reduce ground water consumption. No effluent should be discharged from the mine to any water body or nearby river.	The average water consumption in the plant around 2000 m^3/day. At no time total water requirement is not exceeding 2400 m^3/day. Water stored in the rain water harvesting pond is being used. Wastewater from the mines workshop is being treated in Oil & Grease trapper and treated water is being utilized for dust suppression and plantation/Greenbelt development.

xiii	Top soil, if any, shall be stacked with proper slope at earmarked site(s) only with adequate measures shall be used for reclamation and rehabilitation of mined out areas.	There is no top soil and it is also mentioned in our approved Mining Plan.
xiv	The project proponent shall ensure that no natural water course shall be obstructed due to any mining and plant operations. The company shall make the plan for protection of the natural water course passing through the plant and mine area premises and submit to the Ministry's Regional Office at Lucknow.	Area is scarcity of rain fall therefore no perennial water course is available in the mining area.
xv	The inter burden and other waste generated shall be stacked at earmarked dump site(s) only and shall not be kept active for long period. The total height of the dumps shall not exceed 30 m in three terraces of 10 m each and the overall slope of the dump shall be maintained to 28°. The inter burden dumps shall be scientifically vegetated with suitable native species to prevent erosion and surface run off. Monitoring and management of rehabilitated areas shall continue unit the vegetation becomes self – sustaining. Compliance status shall be submitted to the Ministry of Environment & Forests and its Regional Office, Lucknow on six monthly basis.	Inter burden is being handled as per mining plan and stacked at designated place as per approved mining plan..
xvi	The void left unfilled shall be converted into water body. The higher benches of excavated void/mining pit shall be terraced and plantation to be done to stabilize the slopes. The slope of higher benches shall be made gentler for easy accessibility by local people to use the water body. Peripheral fencing shall be carried out along the excavated area.	Back filling is not being envisaged as mine is under operation through top slicing and it is as per approved mining plan. There is no water body present in our mining area.
xvii	Catch drains and siltation ponds of appropriate size shall be constructed for the working pit, inter burden and mineral dumps to arrest flow of silt and sediment. 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.	Catch drain constructed near mining area as under: 15m* 15m*2m 30m*30m*2
xviii	Garland drain of appropriate size, gradient and length shall be constructed for both mine pit and inter burden dumps and sump capacity shall be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 year 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.	Garland drain & retaining wall made around the mining pit as under: 1 Garland drain : 15m*1m*1m 2 Retaining Wall : 40m*2m*1m
xix	Dimension of the retaining wall at the toe of inter burden dumps and inter burden benches within the mine to check run–off and siltation shall be based on the rain fall data.	As per point no xviii.

xx	Regular monitoring of ground water level and quality shall be carried out by establishing a network of existing wells and constructing new piezometers at suitable locations by the project proponent in and around project area in consultation with Regional Director, Central Ground Water Board. The frequency of monitoring shall be four times a year – pre-monsoon (April/May), monsoon (August), post – monsoon (November), and winter (January). Data thus collected shall be sent regular interval to Ministry of Environment and Forests and its Regional Office at Lucknow, Central Ground Water Authority and Central Ground Water Board.	Regular monitoring of groundwater quality and groundwater level is being done as per CGWA guidelines. Piezometer at DG#4 near the plant has been installed to monitor the regular monitoring of groundwater. As per latest monitoring report monitored data is enclosed as **Annexure-VIII.**
xxi	Wet drilling sequential and controlled blasting method and provision for the control air emissions during blasting using collectors etc. shall be used. The mitigative measure for control of ground vibrations and to arrest fly rocks and boulders shall be implemented.	Wet drilling is done & control blasting is done by using nonel. Blast Vibration is monitored through MINIMATE. To avoid secondary blasting we are using rock breaker for breaking boulders.
xxii	Bench height, width and slope for individual bench shall be properly assessed and implemented. Adequate measure should be adopted to stabilize the slope before abandonment. The fencing around the reservoir should be provided to prevent accidents.	Yes; as per approved mining plan.
xxiii	Action plan for the mining, management of over burden (removal, storage, disposal etc.) reclamation of the mined out area and mine closure should be submitted to the Ministry and its Regional Office at Lucknow.	Noted & Agreed Mining is being done as per approved mining plan.
xxiv	As proposed, green belt shall be developed in 33% of the plant and mine area as per the CPCB guidelines in consultation with DFO.	In the plant & colony, 33 % of the greenbelt has already been developed. As for as greenbelt development in RAS- I Mines is concern, during April 2020 – September 2020, 1810 nos. trees have been planted in RAS-Mines. Total 26218 nos. of trees have been planted in RAS-I Mines, covering area 19.7 Hectare land. Status of Greenbelt (Plantation) status as on 01.10.2020 is attached as **Annexure- IX.**
xxv	All the recommendation of the Corporate Responsibility or Environmental Protection (CREP) for the cement plants shall be strictly followed.	All the recommendation of CREP for the Cement Plant are being strictly followed. Copy of same is enclosed herewith as **Annexure-X.**
xxvi	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.	Vehicular emission of the Mines HEMM is being monitored periodically and copy of the same is enclosed as **Annexure-XI.**
xxvii	Risk and Disaster Management Plan along with the mitigation measure should be prepared and a copy submitted to the Ministry's Regional Office at Lucknow, SPCB and CPCB within 3 months of issue of environment clearance letter.	On Site Emergency Plan of Ambuja Cements Limited, Unit: Rabriyawas is prepared and applicable. Copy of same has already submitted to Ministry's Regional Office at Lucknow, SPCB and CPCB.
xxviii	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 & agreed.
xxix	The company shall comply with the commitments made during public hearing held on 29th July, 2011 and a separate budget for implementing the same shall be allocated	As committed during public hearing; present status as on 31 March 202[illegible] is being enclosed as **Annexure-XII.**

	and information submitted to the Ministry's Regional Office at Lucknow.	
xxx	At least 5% of the total cost of the project should be earmarked towards the Enterprise Social Commitment based on Public hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Lucknow. Implementation of such program should be ensured accordingly in time bound manner	Noted, Agreed and Complied.
xxxi	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, safe drinking water, medical health care, crèche etc. the housing may be in the form of temporary structures to be removed after the completion of the project.	Complied.
xxxii.	The Company shall submit within three months their policy towards Corporate Environment Responsibility which should inter-alia address (i) Standards operating process/ procedure to being into focus any infringement/ violation of environmental or forests norms/ conditions, (ii) Hierarchical system of Administrative order of the Company to deal with environment issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non compliance/ violation environment norms to the Board of Directors of the company and/ or stakeholders or shareholders.	Ambuja Cements Limited has well defined Corporate Environmental Policy as per MoEF circular J-11013/41/2006-IA.II(I) dated 18 May 2012, Copy of the same is enclosed as **Annexure XIII.**
	B. General Conditions :	
i	The project authority shall adhere to the stipulations made by Rajasthan State Pollution Control Board (RSPCB) and State Government.	Noted & being complied.
ii	No further expansion or modification of the plant shall be carried out without prior approval of this Ministry.	Noted please.
iii	The gaseous emissions from various process units shall conform to the load/ mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The RSPCB may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time, the emission level shall go beyond the prescribed standards. Interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.	Gaseous emission from kiln stack and CPP stack confirmed to the prescribed standard notified by MoEF&CC on 10 May 2016 and 07 December 2015. **During October 2020- March 2021**, at no time emission level went beyond the prescribed standard. Interlocking facilities has already been provided to process equipment.
iv.	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environmental (Protection) Act, 1986 Rules viz. 75 dBA (day time) and 70 dBA	Necessary preventive measures have been taken to maintain the overall noise in and around the area kept well within the 85 db(A). Regular maintenance of plant machinery, enclosures, silencers etc. have already been provided on noise generation sources. Ambient Noise level at 27 locations are being regularly monitored and results are well below the prescribed limit i.e. 75 dB (A) day time and 70 dB(A) night time. Ambient noise and noise at work zone is being

	(night time).	monitored and reports are enclosed as **Annexure-XIV.**
v	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Operational health surveillance of the worker is being done as per Factory Act.
vi	All the environment management measure given in the EIA/EMP shall be implemented and complied with.	Noted, being complied.
vii	The Company shall develop rain water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.	The Rain water harvesting measures like ground water re-charge structures, Rain water storage pond and check dams at RAS-I Mines have been adopted. We are also planning to enhance the capacity of the rainwater storage pond in near future to meet the maximum water requirement.
viii	Proper housekeeping and adequate occupational health programmes shall be taken up as per the Factory Act.	The common procedure for Health & Safety is well defined under occupational health programmes.
ix	The company shall undertake eco-development measures including community welfare measures in the project area.	Ambuja Cement Foundation has organized various activities on eco-development & community welfare measures in nearby areas/villages. Please refer ACF report is enclosed as **Annexure-XV.**
x	A separate environmental management cell to carry out various management and monitoring functions shall be set up under the control of Senior Executive.	A full-fledged Environment Management Cell has been set up with latest equipment. For detail, please refer **Annexure-XVI.**
xi	The requisite funds shall be earmarked towards total capital cost and recurring cost/annum for environmental pollution control measures and used judiciously to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. The funds so provided shall not be diverted for any other purpose.	Noted, Agreed & Complied.
xii	The Project Authorities shall inform the Regional Office as well the Ministry, the date of financial closure and final approval of the project by the concerned authorities and date of commencing the land development work.	Noted, Agreed & Complied.
xiii	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/ Municipal Corporation, Urban Local Body NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.	Copy of clearance letter sent to concerned Panchyat and others. The clearance letter was also uploaded on the website of Ambuja Cements Limited.
xiv.	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall upload the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM_{10}, SO_2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Compliance of the stipulated environment clearance conditions including results of monitored data has been uploaded on the website of Ambuja Cements Limited the same has been sent to Regional Officer of Luknow, ZO, CPCB Bhopal and RSPCB, Jaipur. The criteria of pollutant levels of PM10, SO2 & NOx are being monitored regularly and the monitored data is being displayed and updated near the main gate of the Ambuja Cements Limited, Unit: Rabriyawas.

Xv	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environment conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Lucknow/CPCB/RSPCB shall monitor the stipulated conditions.	Being complied.
xvi	The Environmental Statement for each financial year ending 31st March in Form – V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MOEF by e-mail.	Environment Statement (Form-V) report for period April 2019- March 2020 submitted for plant & mines and the same has been uploaded on the website of Ambuja Cements Limited. Hard copy of the same is also sent to Regional Office of MoEF, Lucknow through registered post. The Environmental Statement for the financial year 2019- 2020 is being enclosed as **Annexure-XVII.**
xvii	The project proponent shall inform the public that the project has been accorded environment clearance by the Ministry and copies of the clearance letter are available with the RSPCB and may also be seen at the Website of the Ministry of Environment and Forests at http:/envfor.nic.in. This should be advertised within seven days from the date of issue of the clearance letter in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional office at Lucknow.	Complied; Information advertised in newspapers on 12.04.2012 in Danik Bhaskar and Rajasthan Patrika.

Arvind Singh
Sr. Manager (Environment)

Annexure-I

Ambuja Cements Limited
Unit - Rabriyawas

Cement Plant - Reading of Particulate Matter Emission From Point Source

Period : October '2020

Sr. No.	Name of Stack	PCM	Opacity Meter Reading PM in mg/m³ (Avg.)	Norms SPM in mg/Nm³	Remarks
1	Raw Mill/Kiln	JPF	29.5	30.0	
2	Clinker Cooler	ESP	29.0	30.0	
3	Coal Mill- I	JPF	7.7	30.0	
4	Coal Mill- II	JPF	5.3	30.0	
5	Cement Mill- I	JPF	13.2	30.0	
6	Cement Mill- II	JPF	28.0	30.0	
7	Roller Press	JPF	29.0	30.0	

CEMS* ***Continous Emission Monitoring System***

Plant was under shutdown for period 22.10.2020 to 31.10.2020.

Lab Incharge (Env.)

Ambuja Cements Limited
Unit - Rabriyawas

Cement Plant - Reading of Particulate Matter Emission From Point Source

Period : November '2020

Sr. No.	Name of Stack	PCM	Opacity Meter Reading PM in mg/m³ (Avg.)	Norms SPM in mg/Nm³	Remarks
1	Raw Mill/Kiln	JPF	8.9	30.0	
2	Clinker Cooler	ESP	28.5	30.0	
3	Coal Mill- I	JPF	17.3	30.0	
4	Coal Mill- II	JPF	3.6	30.0	
5	Cement Mill- I	JPF	16.0	30.0	
6	Cement Mill- II	JPF	29.0	30.0	
7	Roller Press	JPF	26.0	30.0	

CEMS* Continous Emission Monitoring System

Lab Incharge (Env.)

Ambuja Cements Limited
Unit - Rabriyawas

Cement Plant - Reading of Particulate Matter Emission From Point Source

Period : December '2020

Sr. No.	Name of Stack	PCM	Opacity Meter Reading PM in mg/m³ (Avg.)	Norms SPM in mg/Nm³	Remarks
1	Raw Mill/Kiln	JPF	9.9	30.0	
2	Clinker Cooler	ESP	29.0	30.0	
3	Coal Mill- I	JPF	23.5	30.0	
4	Coal Mill- II	JPF	4.8	30.0	
5	Cement Mill- I	JPF	18.0	30.0	
6	Cement Mill- II	JPF	28.0	30.0	
7	Roller Press	JPF	27.0	30.0	

CEMS* ***Continous Emission Monitoring System***

Lab Incharge (Env.)

Ambuja Cements Limited
Unit - Rabriyawas

Cement Plant - Reading of Particulate Matter Emission From Point Source

Period : January '2021

Sr. No.	Name of Stack	PCM	Opacity Meter Reading PM in mg/m³ (Avg.)	Norms SPM in mg/Nm³	Remarks
1	Raw Mill/Kiln	JPF	10.9	30.0	
2	Clinker Cooler	ESP	28.0	30.0	
3	Coal Mill- I	JPF	19.7	30.0	
4	Coal Mill- II	JPF	7.4	30.0	
5	Cement Mill- I	JPF	27.4	30.0	
6	Cement Mill- II	JPF	24.7	30.0	
7	Roller Press	JPF	28.5	30.0	

CEMS* ***Continous Emission Monitoring System***

Lab Incharge (Env.)

Ambuja Cements Limited
Unit - Rabriyawas

Cement Plant - Reading of Particulate Matter Emission From Point Source

Period : February '2021

Sr. No.	Name of Stack	PCM	Opacity Meter Reading PM in mg/Nm³ (Avg.)	Norms PM in mg/Nm³	Remarks
1	Raw Mill/Kiln	JPF	16.3	30.0	
2	Clinker Cooler	ESP	28.5	30.0	
3	Coal Mill- I	JPF	23.7	30.0	
4	Coal Mill- II	JPF	9.7	30.0	
5	Cement Mill- I	JPF	20.9	30.0	
6	Cement Mill- II	JPF	17.6	30.0	
7	Roller Press	JPF	20.5	30.0	

CEMS* ***Continous Emission Monitoring System***

Lab Incharge (Env.)

Ambuja Cements Limited
Unit - Rabriyawas

Cement Plant - Reading of Particulate Matter Emission From Point Source

Period : March '2021

Sr. No.	Name of Stack	PCM	Opacity Meter Reading PM in mg/Nm³ (Avg.)	Norms PM in mg/Nm³	Remarks
1	Raw Mill/Kiln	JPF	20.86	30.0	
2	Clinker Cooler	ESP	27.56	30.0	
3	Coal Mill- I	JPF	21.39	30.0	
4	Coal Mill- II	JPF	10.04	30.0	
5	Cement Mill- I	JPF	16.97	30.0	
6	Cement Mill- II	JPF	27	30.0	
7	Roller Press	JPF	17.0	30.0	

CEMS* ***Continous Emission Monitoring System***

Lab Incharge (Env.)

Annexure-II

Ambuja Cements Limited
Unit: Rabriyawas

Ambient Air Quality Monitoring Results of Cement Plant

Period: Oct-20

Date of Sampling	At SWRP (C1) µg/M³					Near Old Limestone Crusher (C2) µg/M³					Old Weigh Bridge (C3) µg/M³					SW End of CPP Boundary (Near Ballada Gate) (C4) µg/M³				
	PM10	PM2.5	SO_2	NO_2	CO	RPM	SPM	SO_2	NO_2	CO	RPM	SPM	SO_2	NO_2	CO	RPM	SPM	SO_2	NO_2	CO
01.10.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02.10.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03.10.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04.10.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05.10.2020	60.12	40.22	9.00	13.80	NT	69.45	201.32	9.50	13.90	NT	70.80	207.56	9.50	14.00	NT	71.56	215.67	10.00	14.00	NT
06.10.2020	59.77	41.09	9.00	13.92	NT	68.55	202.34	9.60	13.94	NT	69.66	206.50	9.50	14.00	NT	70.57	213.49	9.50	14.00	NT
07.10.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.10.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.10.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.10.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11.10.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12.10.2020	61.29	42.23	9.50	13.97	NT	70.11	208.39	9.50	14.00	NT	70.87	213.35	10.00	14.00	NT	72.67	219.98	10.00	14.00	NT
13.10.2020	60.57	42.02	9.50	13.87	NT	71.11	209.22	9.50	14.00	NT	70.19	212.49	10.00	14.00	NT	71.36	220.20	10.00	14.00	NT
14.10.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15.10.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16.10.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17.10.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18.10.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19.10.2020	61.00	41.70	9.00	13.50	NT	69.07	210.32	9.59	14.00	NT	70.44	217.78	10.00	14.00	NT	71.49	225.58	10.05	14.00	NT
20.10.2020	60.62	42.00	9.50	14.00	NT	69.90	213.49	10.00	14.00	NT	70.77	218.20	10.00	14.00	NT	70.50	227.30	10.00	14.07	NT
21.10.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22.10.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23.10.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24.10.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25.10.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26.10.2020	59.90	40.40	9.00	13.60	NT	67.60	217.90	10.00	14.00	NT	69.40	233.80	10.00	14.00	NT	71.00	240.00	10.00	14.00	NT
27.10.2020	57.70	40.50	10.00	13.99	NT	68.90	222.30	10.00	14.00	NT	70.30	234.50	10.00	14.00	NT	72.39	241.40	10.00	14.00	NT
28.10.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29.10.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30.10.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31.10.2020																				
Average	60.12	41.27	9.31	13.83	NT	69.34	210.66	9.71	13.98	NT	70.30	218.02	9.88	14.00	NT	71.47	225.45	9.94	14.01	NT

NT: - NOT TRACEABLE IN THE SAMPLE.

Plant was under shutdown for period 22.10.2020- 31.10.2020

Lab. Incharge (Env.)

F01(09-10)/02

Annexure-II

Ambuja Cements Limited
Unit: Rabriyawas

Ambient Air Quality Monitoring Results of Cement Plant

Period: Nov-20

Date of Sampling	At SWRP (C1)					Near Old Limestone Crusher (C2)					Old Weigh Bridge (C3)					SW End of CPP Boundary (Near Ballada Gate) (C4)				
	µg/M³					µg/M³					µg/M³					µg/M³				
	PM10	PM2.5	SO_2	NO_2	CO	RPM	SPM	SO_2	NO_2	CO	RPM	SPM	SO_2	NO_2	CO	RPM	SPM	SO_2	NO_2	CO
01.11.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02.11.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03.11.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04.11.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05.11.2020	61.30	41.56	9.00	13.50	NT	70.40	202.42	9.50	13.70	NT	72.35	209.58	9.50	14.00	NT	73.15	216.67	10.00	14.00	NT
06.11.2020	60.22	42.77	9.00	13.50	NT	69.43	203.45	9.60	13.90	NT	70.76	207.57	9.50	14.00	NT	71.57	214.48	9.50	14.00	NT
07.11.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08.11.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09.11.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.11.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11.11.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12.11.2020	61.99	43.00	9.50	13.90	NT	71.56	209.47	9.50	14.00	NT	71.90	214.30	10.00	14.00	NT	73.00	215.67	10.00	14.00	NT
13.11.2020	62.07	43.47	9.50	13.95	NT	72.56	210.21	9.50	14.00	NT	72.89	214.78	10.00	14.00	NT	72.79	219.77	10.00	14.00	NT
14.11.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15.11.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16.11.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17.11.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18.11.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19.11.2020	62.05	42.49	9.00	13.60	NT	70.75	213.49	9.50	14.00	NT	71.87	218.75	10.00	14.00	NT	72.78	220.87	10.00	14.00	NT
20.11.2020	61.82	43.09	9.50	14.00	NT	68.22	215.90	10.00	14.00	NT	72.76	220.87	10.00	14.00	NT	71.76	226.75	10.00	14.00	NT
21.11.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22.11.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23.11.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24.11.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25.11.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26.11.2020	60.90	41.45	9.00	14.00	NT	68.89	219.97	10.00	14.00	NT	70.76	230.86	10.00	14.00	NT	72.71	238.90	10.00	14.00	NT
27.11.2020	61.77	42.40	10.00	14.00	NT	69.74	225.50	10.00	14.00	NT	72.34	237.88	10.00	14.00	NT	73.50	244.90	10.00	14.00	NT
28.11.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29.11.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30.11.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Average	**61.52**	**42.53**	**9.31**	**13.81**	**NT**	**70.19**	**212.55**	**9.70**	**13.95**	**NT**	**71.95**	**219.32**	**9.88**	**14.00**	**NT**	**72.66**	**224.75**	**9.94**	**14.00**	**NT**

NT: - NOT TRACEABLE IN THE SAMPLE.

Lab. Incharge (Env.)
F01(09-10)/02

Ambuja Cements Limited
Unit: Rabriyawas

Ambient Air Quality Monitoring Results of Cement Plant

Period: Dec-20

Date of Sampling	At SWRP (C1)					Near Old Limestone Crusher (C2)					Old Weigh Bridge (C3)					SW End of CPP Boundary (Near Ballada Gate) (C4)				
	µg/M³					µg/M³					µg/M³					µg/M³				
	PM10	PM2.5	SO_2	NO_2	CO	RPM	SPM	SO_2	NO_2	CO	RPM	SPM	SO_2	NO_2	CO	RPM	SPM	SO_2	NO_2	CO
01.12.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02.12.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03.12.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04.12.2020	60.40	40.12	8.50	13.50	NT	68.20	201.03	9.00	13.60	NT	71.78	208.45	9.00	13.70	NT	72.22	215.90	9.50	14.00	NT
05.12.2020	60.12	41.70	8.50	13.50	NT	69.23	202.12	9.00	13.85	NT	69.79	206.34	9.00	14.00	NT	70.23	213.67	9.50	14.00	NT
06.12.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07.12.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08.12.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09.12.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.12.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11.12.2020	60.57	42.00	8.50	13.50	NT	70.45	208.44	9.00	13.80	NT	70.60	214.30	9.00	14.00	NT	72.30	214.50	9.50	14.00	NT
12.12.2020	61.35	42.55	8.50	13.90	NT	71.40	209.70	9.00	14.00	NT	71.60	213.40	9.00	14.00	NT	71.00	218.90	9.50	14.00	NT
13.12.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14.12.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15.12.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16.12.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17.12.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18.12.2020	61.50	41.30	8.50	13.60	NT	69.88	212.30	9.00	13.90	NT	70.66	217.67	9.50	14.00	NT	71.90	219.90	9.50	14.00	NT
19.12.2020	60.70	42.39	8.50	13.70	NT	68.21	214.50	9.00	13.98	NT	71.50	219.89	9.50	14.00	NT	70.50	224.59	9.50	14.00	NT
20.12.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.12.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22.12.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23.12.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24.12.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25.12.2020	60.39	40.45	9.00	13.90	NT	68.32	218.56	9.50	14.00	NT	70.02	229.46	9.50	14.00	NT	71.89	237.90	9.50	14.00	NT
26.12.2020	60.90	41.80	9.00	13.95	NT	69.00	224.57	9.50	14.00	NT	71.56	236.77	9.50	14.00	NT	72.50	243.50	9.50	14.00	NT
27.12.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28.12.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29.12.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30.12.2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31.12.2020																				
Average	**60.74**	**41.54**	**8.63**	**13.69**	**NT**	**69.34**	**211.40**	**9.13**	**13.89**	**NT**	**70.94**	**218.29**	**9.25**	**13.96**	**NT**	**71.57**	**223.61**	**9.50**	**14.00**	**NT**

NT: - NOT TRACEABLE IN THE SAMPLE.

Lab. Incharge (Env.)
F01(09-10)/02

Ambuja Cements Limited
Unit: Rabriyawas

Ambient Air Quality Monitoring Results of Cement Plant

Period: Jan-21

Date of Sampling	At SWRP (C1)					Near Old Limestone Crusher (C2)					Old Weigh Bridge (C3)					SW End of CPP Boundary (Near Ballada Gate) (C4)				
	µg/M³					µg/M³					µg/M³					µg/M³				
	PM10	PM2.5	SO_2	NO_2	CO	RPM	SPM	SO_2	NO_2	CO	RPM	SPM	SO_2	NO_2	CO	RPM	SPM	SO_2	NO_2	CO
01.01.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02.01.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03.01.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04.01.2021	61.30	41.57	8.40	13.50	NT	69.50	202.39	8.50	14.00	NT	72.50	209.77	8.50	13.80	NT	73.44	217.89	8.50	14.00	NT
05.01.2021	62.55	42.67	8.50	13.50	NT	70.89	204.45	9.00	14.00	NT	71.58	210.59	9.00	14.00	NT	72.49	216.79	9.00	14.00	NT
06.01.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07.01.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08.01.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09.01.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.01.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11.01.2021	59.79	43.00	8.50	13.50	NT	71.47	207.68	9.00	14.00	NT	72.55	215.58	9.00	14.00	NT	73.54	215.59	9.00	14.00	NT
12.01.2021	60.66	42.09	8.50	13.80	NT	72.00	210.07	9.00	14.00	NT	72.80	216.90	9.00	14.00	NT	72.45	217.67	9.00	14.00	NT
13.01.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14.01.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15.01.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16.01.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17.01.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18.01.2021	60.99	42.56	8.50	13.70	NT	70.77	213.89	9.00	14.00	NT	71.88	218.90	9.00	14.00	NT	72.00	220.90	9.50	14.00	NT
19.01.2021	61.22	42.80	8.50	13.80	NT	69.60	215.70	9.00	14.00	NT	72.33	220.90	9.50	14.00	NT	73.00	225.78	9.50	14.00	NT
20.01.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.01.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22.01.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23.01.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24.01.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25.01.2021	61.90	40.99	9.00	13.70	NT	69.77	219.00	9.50	14.00	NT	71.77	228.90	9.50	14.00	NT	72.76	236.89	9.50	14.00	NT
26.01.2021	59.90	42.00	9.00	13.90	NT	70.89	225.76	9.50	14.00	NT	72.56	235.78	9.50	14.00	NT	72.89	242.76	9.50	14.00	NT
27.01.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28.01.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29.01.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30.01.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31.01.2021																				
Average	**61.04**	**42.21**	**8.61**	**13.68**	**NT**	**70.61**	**212.37**	**9.06**	**14.00**	**NT**	**72.25**	**219.67**	**9.13**	**13.98**	**NT**	**72.82**	**224.28**	**9.19**	**14.00**	**NT**

NT: - NOT TRACEABLE IN THE SAMPLE.

Lab. Incharge (Env.)
F01(09-10)/02

Ambuja Cements Limited
Unit: Rabriyawas

Ambient Air Quality Monitoring Results of Cement Plant

Period: Feb-21

Date of Sampling	At SWRP (C1)					Near Old Limestone Crusher (C2)					Old Weigh Bridge (C3)					SW End of CPP Boundary (Near Ballada Gate) (C4)				
	µg/M^3					µg/M^3					µg/M^3					µg/M^3				
	PM10	PM2.5	SO_2	NO_2	CO	RPM	SPM	SO_2	NO_2	CO	RPM	SPM	SO_2	NO_2	CO	RPM	SPM	SO_2	NO_2	CO
01.02.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02.02.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03.02.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04.02.2021	61.90	42.00	8.50	13.50	NT	69.90	203.75	8.50	14.00	NT	72.65	210.20	8.50	14.00	NT	74.00	218.80	8.50	14.00	NT
05.02.2021	62.00	43.00	8.50	13.50	NT	70.90	205.00	8.50	14.00	NT	72.55	211.12	8.50	14.00	NT	73.00	217.00	9.00	14.00	NT
06.02.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07.02.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08.02.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09.02.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.02.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11.02.2021	60.95	43.20	8.50	13.50	NT	71.80	207.90	9.00	14.00	NT	72.60	216.00	9.00	14.00	NT	73.85	216.00	9.00	14.00	NT
12.02.2021	61.00	42.70	8.50	13.50	NT	72.10	210.50	9.00	14.00	NT	72.90	217.00	9.00	14.00	NT	72.67	217.80	9.00	14.00	NT
13.02.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14.02.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15.02.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16.02.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17.02.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18.02.2021	61.00	42.90	8.50	14.00	NT	71.00	214.00	9.00	14.00	NT	72.00	219.00	9.00	14.00	NT	71.00	219.90	9.00	14.00	NT
19.02.2021	61.50	42.88	8.50	14.00	NT	70.00	216.00	9.00	14.00	NT	72.80	221.00	9.50	14.00	NT	73.20	225.90	9.50	14.00	NT
20.02.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.02.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22.02.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23.02.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24.02.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25.02.2021	62.00	41.00	9.00	13.50	NT	70.00	219.80	9.50	14.00	NT	71.99	229.00	9.50	14.00	NT	72.90	237.00	9.50	14.00	NT
26.02.2021	61.90	42.80	9.00	13.50	NT	71.00	225.99	9.50	14.00	NT	72.78	235.90	9.50	14.00	NT	73.00	240.90	9.50	14.00	NT
27.02.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28.02.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Average	**61.53**	**42.56**	**8.63**	**13.63**	**NT**	**70.84**	**212.87**	**9.00**	**14.00**	**NT**	**72.53**	**219.90**	**9.06**	**14.00**	**NT**	**72.95**	**224.16**	**9.13**	**14.00**	**NT**

NT: - NOT TRACEABLE IN THE SAMPLE.

Lab. Incharge (Env.)
F01(09-10)/02

Ambuja Cements Limited
Unit: Rabriyawas

Ambient Air Quality Monitoring Results of Cement Plant

Period: Mar-21

Date of Sampling	At SWRP (C1)					Near Old Limestone Crusher (C2)					Old Weigh Bridge (C3)					SW End of CPP Boundary (Near Ballada Gate) (C4)				
	µg/M³					µg/M³					µg/M³					µg/M³				
	PM10	PM2.5	SO_2	NO_2	CO	RPM	SPM	SO_2	NO_2	CO	RPM	SPM	SO_2	NO_2	CO	RPM	SPM	SO_2	NO_2	CO
01.03.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02.03.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03.03.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04.03.2021	62.00	42.50	8.50	13.50	NT	70.00	204.00	8.50	14.00	NT	73.00	211.00	8.50	14.00	NT	74.50	217.00	8.50	14.00	NT
05.03.2021	62.50	42.00	8.50	13.50	NT	71.00	206.00	8.50	14.00	NT	74.00	212.00	8.50	14.00	NT	74.50	218.00	8.50	14.00	NT
06.03.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07.03.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08.03.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09.03.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.03.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11.03.2021	61.00	43.00	8.50	13.50	NT	72.00	208.00	9.00	14.00	NT	73.00	217.00	9.00	14.00	NT	74.00	217.00	9.00	14.00	NT
12.03.2021	62.00	44.00	8.50	13.50	NT	73.00	211.00	9.00	14.00	NT	73.00	218.00	9.00	14.00	NT	73.00	219.00	9.00	14.00	NT
13.03.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14.03.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15.03.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16.03.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17.03.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18.03.2021	62.50	43.00	8.50	14.00	NT	73.00	215.00	9.00	14.00	NT	74.00	220.00	9.00	14.00	NT	73.00	221.00	9.00	14.00	NT
19.03.2021	62.00	43.00	8.50	14.00	NT	72.00	218.00	9.00	14.00	NT	73.00	222.00	9.50	14.00	NT	74.50	226.00	9.50	14.00	NT
20.03.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.03.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22.03.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23.03.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24.03.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25.03.2021	61.50	42.40	8.50	13.50	NT	71.00	221.00	9.50	14.00	NT	72.00	230.00	9.50	14.00	NT	73.00	240.00	9.50	14.00	NT
26.03.2021	63.00	43.00	9.00	13.50	NT	72.00	227.00	9.50	14.00	NT	73.00	236.00	9.50	14.00	NT	74.00	241.00	9.50	14.00	NT
27.03.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28.03.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29.03.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30.03.2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31.03.2021																				
Average	62.06	42.86	8.56	13.63	NT	71.75	213.75	9.00	14.00	NT	73.13	220.75	9.06	14.00	NT	73.81	224.88	9.06	14.00	NT

NT: - NOT TRACEABLE IN THE SAMPLE.

Lab. Incharge (Env.)
F01(09-10)/02

Annexure - III

AMBUJA CEMENTS LIMITED

UNIT – RABRIYAWAS

SWRP ANALYSIS REPORT FOR THE MONTH OF OCTOBER '2020

S. No.	Parameters	Result
1.	pH	7.70
2.	BOD, at 27°C, 3 days	18.20
3.	COD	70.00
4.	TSS	64.00
5.	Oil & Grease	<2.0
6.	Ammonical Nitrogen (as N)	<2
7.	Sulphide (as S)	<0.05

All parameters in mg/l except pH.

Lab Incharge (Env.)

AMBUJA CEMENTS LIMITED

UNIT – RABRIYAWAS

SWRP ANALYSIS REPORT FOR THE MONTH OF NOVEMBER '2020

S. No.	Parameters	Result
1.	pH	7.75
2.	BOD, at 27^{o}C, 3 days	18.50
3.	COD	72.00
4.	TSS	65.00
5.	Oil & Grease	<2.0
6.	Ammonical Nitrogen (as N)	<2
7.	Sulphide (as S)	<0.05

All parameters in mg/l except pH.

Lab Incharge (Env.)

AMBUJA CEMENTS LIMITED

UNIT – RABRIYAWAS

SWRP ANALYSIS REPORT FOR THE MONTH OF DECEMBER '2020

S. No.	Parameters	Result
1.	pH	7.80
2.	BOD, at 27^{O}C, 3 days	19.00
3.	COD	74.00
4.	TSS	66.00
5.	Oil & Grease	<2.0
6.	Ammonical Nitrogen (as N)	<2
7.	Sulphide (as S)	<0.05

All parameters in mg/l except pH.

Lab Incharge (Env.)

~~Annexure-1~~

AMBUJA CEMENTS LIMITED

UNIT – RABRIYAWAS

SWRP ANALYSIS REPORT FOR THE MONTH OF JANUARY '2021

S. No.	Parameters	Result
1.	pH	7.90
2.	BOD, at $27^{O}C$, 3 days	18.00
3.	COD	75.00
4.	TSS	64.00
5.	Oil & Grease	<2.0
6.	Ammonical Nitrogen (as N)	<2
7.	Sulphide (as S)	<0.05

All parameters in mg/l except pH.

Lab Incharge (Env.)

AMBUJA CEMENTS LIMITED

UNIT – RABRIYAWAS

SWRP ANALYSIS REPORT FOR THE MONTH OF FEBRUARY '2021

S. No.	Parameters	Result
1.	pH	7.85
2.	BOD, at $27^{o}C$, 3 days	17.00
3.	COD	74.00
4.	TSS	62.00
5.	Oil & Grease	<2.0
6.	Ammonical Nitrogen (as N)	<2
7.	Sulphide (as S)	<0.05

All parameters in mg/l except pH.

Lab Incharge (Env.)

AMBUJA CEMENTS LIMITED

UNIT – RABRIYAWAS

SWRP ANALYSIS REPORT FOR THE MONTH OF ~~FEBRUARY~~ MARCH '2021

S. No.	Parameters	Result
1.	pH	7.80
2.	BOD, at 27^{o}C, 3 days	18.00
3.	COD	68.00
4.	TSS	60.00
5.	Oil & Grease	<2.0
6.	Ammonical Nitrogen (as N)	<2
7.	Sulphide (as S)	<0.05

All parameters in mg/l except pH.

Lab Incharge (Env.)

Annexure-IV

TEAM TEST HOUSE

(Unit of Team Institute of Science & Technology Pvt. Ltd.)

TC-5025

Approved by Ministry of Environment and Forest, Government of India as Environmental Laboratory

RSPCB ISO 9001:2015 OHSAS 18001:2007 JDA/UDH

Office : E-65, Chitranjan Marg,
C-Scheme, Jaipur - 302001, Rajasthan
Phone : +91 6377210064, 9414077379,
Website : www.teamtesthouse.com
Email : team.bdhead@gmail.com

Laboratory : G1-584, RIICO Industrial Area,
Sitapura, Jaipur - 302022, Rajasthan
Phone : +91 9460222039, 9460222049,
Email : director@teamtesthouse.com,
Email : marketinglab@teamtesthouse.com

TEST REPORT

Report No./ULR No. :	TC502521400000562	Date :	15-03-2021
Issued To :	M/S Ambuja Cements Limited (Unit-Rabriyawas) P.O.-Rabriyawas, Tehsil-Jaitaran, District-Pali, Pali (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Fugitive Emission Quality Monitoring	Date of Sample Collection/Monitoring :	17-02-2021
Point of Collection :	Cement Mill Office	Date of Receipt :	22-02-2021
Date of Test/Analysis :	22-02-2021 to 15-03-2021	Sampling Plan :	IS 5182:2000(Part 14)RA 2014
Quantity of Sample :	-	Sample Collected By :	Rakesh Sharma
Unit's representative :	Dr Arvind Singh	Condition of Sample :	Fit for testing

RESULTS

S.No	Parameters	Observed Value	Testing Protocol
1	Suspended Particulate Matter [microgram/m3]	492.6	IS 5182 (Part 4) : 1999 RA 2019
2	Respirable Suspended Particulate Matter [microgram/m3]	111.67	IS 5182 (Part 23)-2006 RA 2017

Notes :-

The results listed refer only to the tested sample (s) & parameters (s). Endorsement of products is neither inferred nor implied.

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The samples will be destroyed after 15 days from the date of issue of test report unless otherwise specified.

Puran Mal Yogi
Senior Analyst

Rajesh Maheshwari
Authorized Signatory
(Report No: TC502521400000562)

TEAM TEST HOUSE

(Unit of Team Institute of Science & Technology Pvt. Ltd.)

TC-5025

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Email : team.bdhead@gmail.com

Laboratory : G1-584, RIICO Industrial Area,
Sitapura, Jaipur - 302022, Rajasthan
Phone : +91 9460222039, 9460222049,
Email : director@teamtesthouse.com,
Email : marketinglab@teamtesthouse.com

TEST REPORT

Report No./ULR No. :	TC502521400000563	Date :	15-03-2021
Issued To :	M/S Ambuja Cements Limited (Unit-Rabriyawas) P.O.-Rabriyawas, Tehsil-Jaitaran, District-Pali, Pali (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Fugitive Emission Quality Monitoring	Date of Sample Collection/Monitoring :	17-02-2021
Point of Collection :	Rooller Press Area	Date of Receipt :	22-02-2021
Date of Test/Analysis :	22-02-2021 to 15-03-2021	Sampling Plan :	IS 5182:2000(Part 14)RA 2014
Quantity of Sample :	-	Sample Collected By :	Rakesh Sharma
Unit's representative :	Dr Arvind Singh	Condition of Sample :	Fit for testing

RESULTS

S.No	Parameters	Observed Value	Testing Protocol
1	Suspended Particulate Matter [microgram/m3]	465.54	IS 5182 (Part 4) : 1999 RA 2019
2	Respirable Suspended Particulate Matter [microgram/m3]	110.49	IS 5182 (Part 23)-2006 RA 2017

Notes :-

The results listed refer only to the tested sample (s) & parameters (s). Endorsement of products is neither inferred nor implied.

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Puran Mal Yogi
Senior Analyst

Rajesh Maheshwari
Authorized Signatory

(Report No: TC502521400000563)

TEAM TEST HOUSE

(Unit of Team Institute of Science & Technology Pvt. Ltd.)

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Website : www.teamtesthouse.com
Email : team.bdhead@gmail.com

Laboratory : G1-584, RIICO Industrial Area,
Sitapura, Jaipur - 302022, Rajasthan
Phone : +91 9460222039, 9460222049,
Email : director@teamtesthouse.com,
Email : marketinglab@teamtesthouse.com

TEST REPORT

Report No./ULR No. :	TC502521400000564	Date :	15-03-2021
Issued To :	M/S Ambuja Cements Limited (Unit-Rabriyawas) P.O.-Rabriyawas, Tehsil-Jaitaran, District-Pali, Pali (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Fugitive Emission Quality Monitoring	Date of Sample Collection/Monitoring :	18-02-2021
Point of Collection :	Loading Area 3 & 4	Date of Receipt :	22-02-2021
Date of Test/Analysis :	22-02-2021 to 15-03-2021	Sampling Plan :	IS 5182:2000(Part 14)RA 2014
Quantity of Sample :	-	Sample Collected By :	Rakesh Sharma
Unit's representative :	Dr Arvind Singh	Condition of Sample :	Fit for testing

RESULTS

S.No	Parameters	Observed Value	Testing Protocol
1	Suspended Particulate Matter [microgram/m3]	443.62	IS 5182 (Part 4) : 1999 RA 2019
2	Respirable Suspended Particulate Matter [microgram/m3]	136.46	IS 5182 (Part 23)-2006 RA 2017

Notes :-

The results listed refer only to the tested sample (s) & parameters (s). Endorsement of products is neither inferred nor implied.

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Puran Mal Yogi
Senior Analyst

Rajesh Maheshwari
Authorized Signatory

(Report No: TC502521400000564)

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(Unit of Team Institute of Science & Technology Pvt. Ltd.)

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Office : E-65, Chitranjan Marg,
C-Scheme, Jaipur - 302001, Rajasthan
Phone : +91 6377210064, 9414077379,
Website : www.teamtesthouse.com
Email : team.bdhead@gmail.com

Laboratory : G1-584, RIICO Industrial Area,
Sitapura, Jaipur - 302022, Rajasthan
Phone : +91 9460222039, 9460222049,
Email : director@teamtesthouse.com,
Email : marketinglab@teamtesthouse.com

TEST REPORT

Report No./ULR No. :	TC502521400000565	Date :	15-03-2021
Issued To :	M/S Ambuja Cements Limited (Unit-Rabriyawas) P.O.-Rabriyawas, Tehsil-Jaitaran, District-Pali, Pali (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Fugitive Emission Quality Monitoring	Date of Sample Collection/Monitoring :	18-02-2021
Point of Collection :	Loading Area 2 & 3	Date of Receipt :	22-02-2021
Date of Test/Analysis :	22-02-2021 to 15-03-2021	Sampling Plan :	IS 5182:2000(Part 14)RA 2014
Quantity of Sample :	-	Sample Collected By :	Rakesh Sharma
Unit's representative :	Dr Arvind Singh	Condition of Sample :	Fit for testing

RESULTS

S.No	Parameters	Observed Value	Testing Protocol
1	Suspended Particulate Matter [microgram/m3]	486.29	IS 5182 (Part 4) : 1999 RA 2019
2	Respirable Suspended Particulate Matter [microgram/m3]	93.13	IS 5182 (Part 23)-2006 RA 2017

Notes :-

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The samples will be destroyed after 15 days from the date of issue of test report unless otherwise specified.

Puran Mal Yogi
Senior Analyst

Rajesh Maheshwari
Authorized Signatory

(Report No: TC502521400000565)

TEAM TEST HOUSE

(Unit of Team Institute of Science & Technology Pvt. Ltd.)

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C-Scheme, Jaipur - 302001, Rajasthan
Phone : +91 6377210064, 9414077379,
Website : www.teamtesthouse.com
Email : team.bdhead@gmail.com

Laboratory : G1-584, RIICO Industrial Area,
Sitapura, Jaipur - 302022, Rajasthan
Phone : +91 9460222039, 9460222049,
Email : director@teamtesthouse.com,
Email : marketinglab@teamtesthouse.com

TEST REPORT

Report No./ULR No. :	TC502521400000566	Date :	15-03-2021
Issued To :	M/S Ambuja Cements Limited (Unit-Rabriyawas) P.O.-Rabriyawas, Tehsil-Jaitaran, District-Pali, Pali (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Fugitive Emission Quality Monitoring	Date of Sample Collection/Monitoring :	20-02-2021
Point of Collection :	Loading Area 1 & 2	Date of Receipt :	22-02-2021
Date of Test/Analysis :	22-02-2021 to 15-03-2021	Sampling Plan :	IS 5182:2000(Part 14)RA 2014
Quantity of Sample :	-	Sample Collected By :	Rakesh Sharma
Unit's representative :	Dr Arvind Singh	Condition of Sample :	Fit for testing

RESULTS

S.No	Parameters	Observed Value	Testing Protocol
1	Suspended Particulate Matter [microgram/m3]	429.95	IS 5182 (Part 4) : 1999 RA 2019
2	Respirable Suspended Particulate Matter [microgram/m3]	93.77	IS 5182 (Part 23)-2006 RA 2017

Notes :-

The results listed refer only to the tested sample (s) & parameters (s). Endorsement of products is neither inferred nor implied.

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Puran Mal Yogi
Senior Analyst

Rajesh Maheshwari
Authorized Signatory
(Report No: TC502521400000566)

TEAM TEST HOUSE

(Unit of Team Institute of Science & Technology Pvt. Ltd.)

TC-3025

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Office : E-65, Chitranjan Marg,
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Laboratory : G1-584, RIICO Industrial Area,
Sitapura, Jaipur - 302022, Rajasthan
Phone : +91 9460222039, 9460222049,
Email : director@teamtesthouse.com,
Email : marketinglab@teamtesthouse.com

TEST REPORT

Report No./ULR No. :	TC502521400000567	Date :	15-03-2021
Issued To :	M/S Ambuja Cements Limited (Unit-Rabriyawas) P.O.-Rabriyawas, Tehsil-Jaitaran, District-Pali, Pali (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Fugitive Emission Quality Monitoring	Date of Sample Collection/Monitoring :	20-02-2021
Point of Collection :	Carbon Black Feeding Area	Date of Receipt :	22-02-2021
Date of Test/Analysis :	22-02-2021 to 15-03-2021	Sampling Plan :	IS 5182:2000(Part 14)RA 2014
Quantity of Sample :	-	Sample Collected By :	Rakesh Sharma
Unit's representative :	Dr Arvind Singh	Condition of Sample :	Fit for testing

RESULTS

S.No	Parameters	Observed Value	Testing Protocol
1	Suspended Particulate Matter [microgram/m3]	445.8	IS 5182 (Part 4) : 1999 RA 2019
2	Respirable Suspended Particulate Matter [microgram/m3]	95.25	IS 5182 (Part 23)-2006 RA 2017

Notes :-

The results listed refer only to the tested sample (s) & parameters (s). Endorsement of products is neither inferred nor implied.

This report is not to be reproduced wholly or in part and can not be used evidence in the court of law and should not be used in any advertising media without our special permission in writing.

The samples will be destroyed after 15 days from the date of issue of test report unless otherwise specified.

Puran Mal Yogi
Senior Analyst

Rajesh Maheshwari
Authorized Signatory
(Report No: TC502521400000567)

TEAM TEST HOUSE

(Unit of Team Institute of Science & Technology Pvt. Ltd.)

TC-5025

Approved by Ministry of Environment and Forest, Government of India as Environmental Laboratory

RSPCB ISO 9001:2015 OHSAS 18001:2007 JDA/UDH

Office : E-65, Chitranjan Marg,
C-Scheme, Jaipur - 302001, Rajasthan
Phone : +91 6377210064, 9414077379,
Website : www.teamtesthouse.com
Email : team.bdhead@gmail.com

Laboratory : G1-584, RIICO Industrial Area,
Sitapura, Jaipur - 302022, Rajasthan
Phone : +91 9460222039, 9460222049,
Email : director@teamtesthouse.com,
Email : marketinglab@teamtesthouse.com

TEST REPORT

Report No./ULR No. :	TC502521400000568	Date :	15-03-2021
Issued To :	M/S Ambuja Cements Limited (Unit-Rabriyawas) P.O.-Rabriyawas, Tehsil-Jaitaran, District-Pali, Pali (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Fugitive Emission Quality Monitoring	Date of Sample Collection/Monitoring :	18-02-2021
Point of Collection :	AFR Shed Area	Date of Receipt :	22-02-2021
Date of Test/Analysis :	22-02-2021 to 15-03-2021	Sampling Plan :	IS 5182:2000(Part 14)RA 2014
Quantity of Sample :	-	Sample Collected By :	Rakesh Sharma
Unit's representative :	Dr Arvind Singh	Condition of Sample :	Fit for testing

RESULTS

S.No	Parameters	Observed Value	Testing Protocol
1	Suspended Particulate Matter [microgram/m3]	481.98	IS 5182 (Part 4) : 1999 RA 2019
2	Respirable Suspended Particulate Matter [microgram/m3]	99.65	IS 5182 (Part 23)-2006 RA 2017

Notes :-

The results listed refer only to the tested sample (s) & parameters (s). Endorsement of products is neither inferred nor implied.

This report is not to be reproduced wholly or in part and can not be used evidence in the court of law and should not be used in any advertising media without our special permission in writing.

The samples will be destroyed after 15 days from the date of issue of test report unless otherwise specified.

Puran Mal Yogi
Senior Analyst

Rajesh Maheshwari
Authorized Signatory

(Report No: TC502521400000568)

TEAM TEST HOUSE

(Unit of Team Institute of Science & Technology Pvt. Ltd.)

TC-5025

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Office : E-65, Chitranjan Marg,
C-Scheme, Jaipur - 302001, Rajasthan
Phone : +91 6377210064, 9414077379,
Website : www.teamtesthouse.com
Email : team.bdhead@gmail.com

Laboratory : G1-584, RIICO Industrial Area,
Sitapura, Jaipur - 302022, Rajasthan
Phone : +91 9460222039, 9460222049,
Email : director@teamtesthouse.com,
Email : marketinglab@teamtesthouse.com

TEST REPORT

Report No./ULR No. :	TC502521400000569	Date :	15-03-2021
Issued To :	M/S Ambuja Cements Limited (Unit-Rabriyawas) P.O.-Rabriyawas, Tehsil-Jaitaran, District-Pali, Pali (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Fugitive Emission Quality Monitoring	Date of Sample Collection/Monitoring :	15-02-2021
Point of Collection :	Near Synthetic Gypsum Plant	Date of Receipt :	22-02-2021
Date of Test/Analysis :	22-02-2021 to 15-03-2021	Sampling Plan :	IS 5182:2000(Part 14)RA 2014
Quantity of Sample :	-	Sample Collected By :	Rakesh Sharma
Unit's representative :	Dr Arvind Singh	Condition of Sample :	Fit for testing

RESULTS

S.No	Parameters	Observed Value	Testing Protocol
1	Suspended Particulate Matter [microgram/m3]	358.94	IS 5182 (Part 4) : 1999 RA 2019
2	Respirable Suspended Particulate Matter [microgram/m3]	86.37	IS 5182 (Part 23)-2006 RA 2017

Notes :-

The results listed refer only to the tested sample (s) & parameters (s). Endorsement of products is neither inferred nor implied.

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The samples will be destroyed after 15 days from the date of issue of test report unless otherwise specified.

Purah Mal Yogi
Senior Analyst

Rajesh Maheshwari
Authorized Signatory
(Report No: TC502521400000569)

TEAM TEST HOUSE

(Unit of Team Institute of Science & Technology Pvt. Ltd.)

TC-5025

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Laboratory : G1-584, RIICO Industrial Area,
Sitapura, Jaipur - 302022, Rajasthan
Phone : +91 9460222039, 9460222049,
Email : director@teamtesthouse.com,
Email : marketinglab@teamtesthouse.com

TEST REPORT

Report No./ULR No. :	TC502521400000570	Date :	15-03-2021
Issued To :	M/S Ambuja Cements Limited (Unit-Rabriyawas) P.O.-Rabriyawas, Tehsil-Jaitaran, District-Pali, Pali (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Fugitive Emission Quality Monitoring	Date of Sample Collection/Monitoring :	18-02-2021
Point of Collection :	Near Raw Mill Area	Date of Receipt :	22-02-2021
Date of Test/Analysis :	22-02-2021 to 15-03-2021	Sampling Plan :	IS 5182:2000(Part 14)RA 2014
Quantity of Sample :	-	Sample Collected By :	Rakesh Sharma
Unit's representative :	Dr Arvind Singh	Condition of Sample :	Fit for testing

RESULTS

S.No	Parameters	Observed Value	Testing Protocol
1	Suspended Particulate Matter [microgram/m3]	480.81	IS 5182 (Part 4) : 1999 RA 2019
2	Respirable Suspended Particulate Matter [microgram/m3]	129.94	IS 5182 (Part 23)-2006 RA 2017

Notes :-

The results listed refer only to the tested sample (s) & parameters (s). Endorsement of products is neither inferred nor implied.

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The samples will be destroyed after 15 days from the date of issue of test report unless otherwise specified.

Puran Mal Yogi
Senior Analyst

Rajesh Maheshwari
Authorized Signatory
(Report No: TC502521400000570)

TEAM TEST HOUSE

(Unit of Team Institute of Science & Technology Pvt. Ltd.)

TC-5025

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C-Scheme, Jaipur - 302001, Rajasthan
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Website : www.teamtesthouse.com
Email : team.bdhead@gmail.com

Laboratory : G1-584, RIICO Industrial Area,
Sitapura, Jaipur - 302022, Rajasthan
Phone : +91 9460222039, 9460222049,
Email : director@teamtesthouse.com,
Email : marketinglab@teamtesthouse.com

TEST REPORT

Report No./ULR No. :	TC502521400000571	Date :	15-03-2021
Issued To :	M/S Ambuja Cements Limited (Unit-Rabriyawas) P.O.-Rabriyawas, Tehsil-Jaitaran, District-Pali, Pali (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Fugitive Emission Quality Monitoring	Date of Sample Collection/Monitoring :	16-02-2021
Point of Collection :	Near Coal Tippler at CPP	Date of Receipt :	22-02-2021
Date of Test/Analysis :	22-02-2021 to 15-03-2021	Sampling Plan :	IS 5182:2000(Part 14)RA 2014
Quantity of Sample :	-	Sample Collected By :	Rakesh Sharma
Unit's representative :	Dr Arvind Singh	Condition of Sample :	Fit for testing

RESULTS

S.No	Parameters	Observed Value	Testing Protocol
1	Suspended Particulate Matter [microgram/m3]	449.19	IS 5182 (Part 4) : 1999 RA 2019
2	Respirable Suspended Particulate Matter [microgram/m3]	94.51	IS 5182 (Part 23)-2006 RA 2017

Notes :-

The results listed refer only to the tested sample (s) & parameters (s). Endorsement of products is neither inferred nor implied.

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Puran Mal Yogi
Senior Analyst

Rajesh Maheshwari
Authorized Signatory

(Report No: TC502521400000571)

TEAM TEST HOUSE

(Unit of Team Institute of Science & Technology Pvt. Ltd.)

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Office : E-65, Chitranjan Marg,
C-Scheme, Jaipur - 302001, Rajasthan
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Website : www.teamtesthouse.com
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Laboratory : G1-584, RIICO Industrial Area,
Sitapura, Jaipur - 302022, Rajasthan
Phone : +91 9460222039, 9460222049,
Email : director@teamtesthouse.com,
Email : marketinglab@teamtesthouse.com

TEST REPORT

Report No./ULR No. :	TC502521400000572	Date :	15-03-2021
Issued To :	M/S Ambuja Cements Limited (Unit-Rabriyawas) P.O.-Rabriyawas, Tehsil-Jaitaran, District-Pali, Pali (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Fugitive Emission Quality Monitoring	Date of Sample Collection/Monitoring :	16-02-2021
Point of Collection :	Packing Plant (I,II,III.IV)	Date of Receipt :	22-02-2021
Date of Test/Analysis :	22-02-2021 to 15-03-2021	Sampling Plan :	IS 5182:2000(Part 14)RA 2014
Quantity of Sample :	-	Sample Collected By :	Rakesh Sharma
Unit's representative :	Dr Arvind Singh	Condition of Sample :	Fit for testing

RESULTS

S.No	Parameters	Observed Value	Testing Protocol
1	Suspended Particulate Matter [microgram/m3]	447.69	IS 5182 (Part 4) : 1999 RA 2019
2	Respirable Suspended Particulate Matter [microgram/m3]	88.86	IS 5182 (Part 23)-2006 RA 2017

Notes :-

The results listed refer only to the tested sample (s) & parameters (s). Endorsement of products is neither inferred nor implied.

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The samples will be destroyed after 15 days from the date of issue of test report unless otherwise specified.

Puran Mal Yogi
Senior Analyst

Rajesh Maheshwari
Authorized Signatory

(Report No: TC502521400000572)

TEAM TEST HOUSE

(Unit of Team Institute of Science & Technology Pvt. Ltd.)

TC-5025

Approved by Ministry of Environment and Forest, Government of India as Environmental Laboratory

RSPCB ISO 9001:2015 OHSAS 18001:2007 JDA/UDH

Office : E-65, Chitranjan Marg,
C-Scheme, Jaipur - 302001, Rajasthan
Phone : +91 6377210064, 9414077379,
Website : www.teamtesthouse.com
Email : team.bdhead@gmail.com

Laboratory : G1-584, RIICO Industrial Area,
Sitapura, Jaipur - 302022, Rajasthan
Phone : +91 9460222039, 9460222049,
Email : director@teamtesthouse.com,
Email : marketinglab@teamtesthouse.com

TEST REPORT

Report No./ULR No. :	TC502521400000573	Date :	15-03-2021
Issued To :	M/S Ambuja Cements Limited (Unit-Rabriyawas) P.O.-Rabriyawas, Tehsil-Jaitaran, District-Pali, Pali (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Fugitive Emission Quality Monitoring	Date of Sample Collection/Monitoring :	16-02-2021
Point of Collection :	Near Coal Mill Area	Date of Receipt :	22-02-2021
Date of Test/Analysis :	22-02-2021 to 15-03-2021	Sampling Plan :	IS 5182:2000(Part 14)RA 2014
Quantity of Sample :	-	Sample Collected By :	Rakesh Sharma
Unit's representative :	Dr Arvind Singh	Condition of Sample :	Fit for testing

RESULTS

S.No	Parameters	Observed Value	Testing Protocol
1	Suspended Particulate Matter [microgram/m3]	424	IS 5182 (Part 4) : 1999 RA 2019
2	Respirable Suspended Particulate Matter [microgram/m3]	85.42	IS 5182 (Part 23)-2006 RA 2017

Notes :-

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Puran Mal Yogi
Senior Analyst

Rajesh Maheshwari
Authorized Signatory
(Report No: TC502521400000573)

Annexure - V

28/2020

Transport Department ,Rajasthan

परिवहन विभाग

प्रदूषण नियंत्रण प्रमाण पत्र

POLLUTION UNDER CONTROL CERTIFICATE

[Approved by Department of Transport, Government of Rajasthan, Jaipur]

परिवहन विभाग राजस्थान सरकार से मान्यता प्राप्त

(Rule 115 of CMV Rules 1989)

76

8875972

Pucc No :	D47RJ21111410
Vehicle No :	RJ22GA2867
Customer Name :	A . C. L.
Customer Mobile :	9929163917
Year of Regn :	17-04-2006
Type [illegible]ehicle :	TRUCK
Make :	Tata Motors
Model :	TRUCK
Test Date :	20-09-2020
Time :	09:01:00 AM
Valid UpTo :	19-03-2021
Center Name :	Veer Tejaji Mobile Puc Center
Center Address :	Khadakali,Gudhabhawadas,Nagaur
Licence No :	RJ21-48/47
Test Result :	Pass

VALID IN ALL INDIA

Photo of Vehicle

Flushing Cycle

Avg	RPM Min	RPM Max	Temp
	1310	2006	0

Sr. No.	RPM Min	RPM Max	Km	HSU%	Temp
1	1310	3277	0.261	10.6	000.0
2	1310	2346	0.000	00.0	000.0
3	1310	3582	0.796	28.9	000.0
Mean			0.352	13.1	

Prescribed Limit for Diesel vehicle	1/m(Light Absorption Co-efficient)	Hartridge Units (HSU)%
Free Acceleration BS II & III	2.45	65
Free Acceleration BS IV	1.62	50
Free Acceleration BS VI 4/3 wheelers	0.7 / 1.5	26 / 48

Validity Six Months for Bharat Stage III or below and one year for Bharat Stage IV/VI vehicles.

Certificate price: ₹ 100

Get Certificate renewed within the expiry date.

Seal of Testing Station | **Testing Station Code** D47RJ121 | **Authorised Signatory**

CERTIFICATE IS ONLY VALID IF SMS RECEIVED FROM REIL/TRANSPORT DEPT. KINDLY DESTROY THE INVALID CERTIFICATE.

Transport Dept. Govt. of Rajasthan

Veh Reg No : RJ22GA2867
PUC No. : D47RJ21111410
Valid up to : 19-03-2021
Scan QR Code to Validate

Transport Dept. Govt. of Rajasthan

Veh Reg No : RJ22GA2867
PUC No. : D47RJ21111410
Valid up to : 19-03-2021
Scan QR Code to Validate

:8/2020

Transport Department ,Rajasthan

प्रदूषण नियंत्रण प्रमाण पत्र

POLLUTION UNDER CONTROL CERTIFICATE

[Approved by Department of Transport, Government of Rajasthan, Jaipur]

परिवहन विभाग राजस्थान सरकार से मान्यता प्राप्त

(Rule 115 of CMV Rules 1989)

8875958

VALID IN ALL INDIA

Pucc No :	D47RJ19107319
Vehicle No :	RJ22UA0593
Customer Name :	A.C.L
Customer Mobile :	9929163917
Year of Regn :	22-05-2008
Type of Vehicle :	OTHERS
Make :	TOYOTA
Model :	INNOVA
Test Date :	19-09-2020
Time :	10:40:52 AM
Valid UpTo :	18-03-2021
Center Name :	Veer teja Mob PUC Center
Center Address :	Sangariya,Jodhpur
Licence No :	RJ19-48/47
Test Result :	Pass

Photo of Vehicle

Flushing Cycle

Avg	RPM Min	RPM Max	Temp
	1310	2299	0

Sr. No.	RPM Min	RPM Max	Km	HSU%	Temp
1	1310	3124	0.233	09.5	000.0
2	1310	3295	0.000	00.0	000.0
3	1310	5598	0.401	15.8	000.0
Mean			0.211	08.4	

Prescribed Limit for Diesel vehicle	1/m(Light Absorption Co-efficient)	Hartridge Units (HSU)%
Free Acceleration BS II & III	2.45	65
Free Acceleration BS IV	1.62	50
Free Acceleration BS VI 4/3 wheelers	0.7 / 1.5	26 / 48

Validity Six Months for Bharat Stage III or below and one year for Bharat Stage IV/VI vehicles.

Certificate price: ₹ 100

Get Certificate renewed within the expiry date.

Seal of Testing Station | **Testing Station Code** -D47RJ19- | **Authorised Signatory**

CERTIFICATE IS ONLY VALID IF SMS RECEIVED FROM REL\TRANSPORT DEPT.KINDLY DESTROY THE INVALID CERTIFICATE.

Transport Dept. Govt. of Rajasthan

Veh Reg No : RJ22UA0593
PUC No. : D47RJ19107319
Valid up to : 18-03-2021
Scan QR Code to Validate

Transport Dept. Govt. of Rajasthan

Veh Reg No : RJ22UA0593
PUC No. : D47RJ19107319
Valid up to : 18-03-2021
Scan QR Code to Validate

Ambuja Cements Limited, Unit: Rabriyawas

Annexure - VI

AF consumption Oct - 20 to March - 21

Material	Qty (MT)
AF-Biomass-JULIFLORA;JUNGLY BABOOL	13,264.00
AF-Biomass- Cow dung	27.98
AF-Biomass-MUSTARD AGRO WASTE	1,117.00
Total Biomass	**14,408.98**
AF-Haz- ETP SLUDGE	692.00
AF-Haz-GRINDING SLUDGE	240.09
AF-Haz-OILY RAGS ; ALTERNATE FUEL	327.09
AF-Haz-PAINT SLUDGE	1,304.00
AF-Haz-PHOSPHATE SLUDGE	42.53
AF-Haz-SEALANT WASTE	12.30
AF-Haz-Spent Carbon	301.56
AF-Haz-WASTE/RESIDUE CONTAINING OIL	164.52
AF-Haz-WTP SLUDGE SLUDGE	14.74
AF-Haz-INCINERATION ASH	0.56
AF-HAZ-PROCESS WASTE CAT-21.1	2.09
AF-HAZ-PROCESS WASTE CAT-23.1	13.79
Total Hazardoues	**3,115.27**
AF-Non Haz-FRP WASTE	25.65
AF-Non Haz-LAMINATED WASTE	74.00
AF-NON HAZ-POLYURETHENE	118.42
AF-Non Haz-TRADE REJECTS	1,183.00
AF-RDF-RDF WITH PLASTIC WASTE	1,817.00
AF-Non Haz-PLASTIC WASTE	482.25
AF-Non Haz-PET WASTE	9.95
AF-Carbon Black/ Petcoke Ash-CARBON BLAC	1,936.52
AF-Non Haz-OFF SPECIFICATION PRODUCTS	3.45
AF-Non Haz-WASTE BIO SLUDGE	77.00
AF-NON-HAZ OTHERS;MIX PLASTIC SCF;EPR	425.00
Total Non hazardoues	**6,152.24**

Total AF	**23676.49**

Annexure VII

Format for filling in Project Details

1. Details of Rain Water Harvesting Structures completed (Type of structure completed, their numbers, and sizes)

DETAILS OF WATER HARVESTING STRUCTURES

Structures	Location	Catchment Area (In Hect.)	Ultimate Capacity (In M³)	Rainwater quantity available (in M³) based on rainfall received in following year							Year of Construction	Beneficiary Villages
				2010	2011	2012	2013	2014	2015	2016		
Cemented Dam No.-1	Kerpura	240	5,32,000	299856	217920	595200	425280	432000	312960	796800	2008-2009	Kerpura, Rabriyawas
Cemented Dam No.-2	Kerpura	48	54320	59971	43584	119040	85056	86400	62592	159360	2008-2009	Kerpura.
Burrow pit	Western zone (within ML)	72	443880	89957	65376	178560	127584	129600	93888	239040	2005-2006	Balara,
Earthen Dam No.-3/1	Western zone (within ML)	16	33800	19990	14528	39680	28352	28800	20864	53120	2007-2008	Balara, Rabriyawas
Earthen Dam No.-3/2	Western zone (within ML)	4	23805	4998	3632	9920	7088	7200	5216	13280	2007-2008	Balara, Rabriyawas
Earthen Dam No.-4/1	Western zone (within ML)	4	113300	4998	3632	9920	7088	7200	5216	13280	2002-2003	Ras (Patan)
Earthen Dam No.-4/2	Western zone (within ML)	2	48300	2499	1816	4960	3544	3600	2608	6640	2003-2004	Ras (Patan)
Earthen Dam No.-4/3	Western zone (within ML)	2	67760	2499	1816	4960	3544	3600	2608	6640	2004-2005	Ras (Patan)
Earthen Dam No.-4/4	Western zone (within ML)	64	553374	79962	58112	158720	113408	115200	83456	212480	2009-2010	Ras (Patan)
Check dam	Western zone (within ML)	150	125500	187410	136200	372000	265800	270000	195600	498000	2009-2010	Balara
DG 4 Water Reservoir	Near DG 4	324	3,55,000	404806	294192	803520	574128	583200	422496	1075680	2010-2011	Balara, Rabriyawas

ROOF TOP RAIN WATER HARVESTING STRUCTURES

Locations	Structures	Structure Details	Year of Construction	Catchment area
Bachelor's Hostel	Tube well – 01 no.	Diameter – 350 mm. Depth – 52 mts.	2008-2009	350.00 Sq.m.
New Type -5 (03 – Blocks)	Tube well – 01 no	Diameter – 350 mm. Depth – 52 mts.	2008-2009	825.00 Sq.m.

Annexure-VII

Format for filling in Project Details

1. Details of Rain Water Harvesting Structures completed (Type of structure completed, their numbers, and sizes)

DETAILS OF WATER HARVESTING STRUCTURES

Structures	Location	Catchment Area (in Hect.)	Ultimate Capacity (in M³)	Rainwater quantity available (in M³) based on rainfall received in following year							Year of Construction	Beneficiary Villages
				2017	2018	2019	2020	2021	2022	2023		
Cemented Dam No.-1	Kerpura	240	5,32,000	461760	410880	783360	650880	-	-	-	2008-2009	Kerpura, Rabriyawas
Cemented Dam No.-2	Kerpura	48	54320	92352	82176	156672	130176	-	-	-	2008-2009	Kerpura.
Burrow pit	Western zone (within ML)	72	443880	138528	123264	235008	195264	-	-	-	2005-2006	Balara,
Earthen Dam No.-3/1	Western zone (within ML)	16	33800	30784	27392	52224	43392	-	-	-	2007-2008	Balara, Rabriyawas
Earthen Dam No.-3/2	Western zone (within ML)	4	23805	7696	6848	13056	10848	-	-	-	2007-2008	Balara, Rabriyawas
Earthen Dam No.-4/1	Western zone (within ML)	4	113300	7696	6848	13056	10848	-	-	-	2002-2003	Ras (Patan)
Earthen Dam No.-4/2	Western zone (within ML)	2	48300	3848	3424	6528	5424	-	-	-	2003-2004	Ras (Patan)
Earthen Dam No.-4/3	Western zone (within ML)	2	67760	3848	3424	6528	5424	-	-	-	2004-2005	Ras (Patan)
Earthen Dam No.-4/4	Western zone (within ML)	64	553374	123136	109568	208896	173568	-	-	-	2009-2010	Ras (Patan)
Check dam	Western zone (within ML)	150	125500	288600	256800	489600	406800	-	-	-	2009-2010	Balara
DG 4 Water Reservoir	Near DG 4	324	3,55,000	223376	154688	1057536	878688	-	-	-	2010-2011	Balara, Rabriyawas

Annexure- VII

Annexure- VIII

Ambuja Cements Ltd.
Unit - Rabriyawas

MONITORING OF WATER TABLE (Piezometer)

(m.b.g.l) Location	Year	Tube Well 10															
		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
T.W. Site	Pre Monsoon	45.8	46.1	45.6	46.2	48.1	50.1	50.2	50.3	48.5	50.9	49.4	51.1	52.7	52.9	48.8	48.7
	Post monsoon	45.2	45.4	45.5	45.0	47.3	48.2	47.9	44.7	46.9	45.1	48.6	42.4	40.6	42.8	38.0	43.7

Abdul

Lab. Incharge (Env.)

Annexure - VIII

Annexure- IX

Ambuja Cements Ltd.
Unit- Rabriyawas

Greenbelt Development (Plantation) as on 30.09.2020

Mines Ras-I:

Date : 01.10.2020

S. No.	Year of Plantation *	Number of Plant Planted	Number of Plant Survived	Survival Rate** (Avg) (%)	Area Covered in Plantation (Hectare)
1	2013-14	4908	587	11.96	3.25
2	2014-15	5100	3430	67.25	5.50
3	2015-16	6000	3685	61.42	4.35
4	2016-17	1200	1012	84.33	1.00
5	2017-18	2500	2410	96.40	1.60
6	2018-19	1700	1683	99.00	1.00
7	2019-20	3000	2940	98.00	2.00
8	2020-21	1810	1773	98.00	1.00
	Total	**26218**	**17520**	**74.05**	**19.7**

Mines Ras-II:

S. No.	Year of Plantation *	Number of Plant Planted	Number of Plant Survived	Survival Rate** (Avg) (%)	Area Covered in Plantation (Hectare)
1	1996 To 2000	10385	510	4.91	11.00
2	2000-2010	113089	49477	43.75	64.45
3	2010-2011	10522	6915	65.72	3.50
4	2011-2012	13513	9500	70.30	4.00
5	2012-2013	10515	7818	74.35	3.50
6	2013-2014	9648	7130	73.90	4.00
7	2014-2015	16200	12117	74.80	5.00
8	2015-2016	7500	6146	81.95	4.80
9	2016-2017	6000	5197	86.62	4.00
10	2017-2018	10500	9392	89.45	5.25
11	2018-2019	11800	11210	95.00	6.00
12	2019-2020	13000	12740	98.00	6.00
13	2020-2021	8235	8070	98.00	4.50
	Total	**240907**	**146222**	**71.56**	**126.00**

* Year of plantation considered **July to June.**
** Calculated as average of all above years (%)

Dr. Satish Saini
Dy. Manager - Environment

Annexure- X

COMPLIANCE REPORT OF CHARTER ON CORPORATE RESPONSIBILITY FOR ENVIRONMENTAL PROTECTION (CREP) FOR CEMENT PLANT AND CAPTIVE POWER PLANT

Cement Plant

S. No.	Condition	Compliance status
1.	Cement Plants, which are not complying with notified standards, shall do the following to meet the standards. 1. Augmentation of existing Air pollution control device. 2. Replacement of existing Air pollution control device.	Complying with notified standards given by RPCB & MoEF&CC.
2.	Cement Plants located in critically polluted or urban areas (including 5 kms. Distance outside urban boundary) will meet 100 mg/Nm3 limit of particulate matter by December 2004 and continue working to reduce the emission of particulate matter to 50 mg/Nm3.	Complying with existing emission standard stipulated by MoEF&CC & RPCB i.e. 30 mg/Nm^3
3.	The new cement kilns to be accorded NOC / Environmental Clearance w.e.f. 01.04.2003 will meet the limit of 50 mg/Nm3 for particulate matter emission.	Noted. We are complying with 30 mg/Nm^3
4.	CPCB will evolve load-based standards by December 2003.	Noted.
5.	CPCB and NCBM will evolve SO2 and NOx emission standards by June 2004.	Noted.
6.	The cement industries will control fugitive emission from all the raw material and products storage and transfer points by December 2003. *However, the feasibility for the control of fugitive emission from limestone and coal storage areas will be decided by the National task Force (NTF). The NTF shall submit its recommendations within three months	JPF are installed at all raw material /product storage and transfer points. Dust suppression by water sprinkling system installed at limestone crusher hopper, coal tippler hopper & additive hopper, which are working efficiently. * Noted.
7.	CPCB, NCBM, BIS and Oil refineries will jointly prepare the policy on use of petroleum coke as fuel in Cement Kiln by July 2003.	Noted.
8.	After performance evaluation of various types of continuous monitoring equipment and feedback from the industries and equipment manufacturers, NTF will decide feasible unit operations/ sections for installation of continuous monitoring system (CMS) by December 2003.	We have already installed continuous monitoring equipment at all stacks on Opacity Meters at raw mill / Kiln Bag House, Clinker cooler ESP, Cement Mills, Coal Mills & CPP ESP stacks.

9.	Tripping in Kiln ESP to be minimized by July 2003 as per the recommendation of NTF.	Not Applicable. Reverse air bag house is installed in place of ESP at Raw mill & Kiln.
10.	Industries will submit the target date to enhance the utilization of waste material by April 2003.	i. Fly ash generated from CPP is fully utilized for PPC manufacturing. ii. Domestic wastewater (Raw sewage) is treated at SWRP and treated water is utilized for plantation. iii. Co-processing of hazardous/non-hazardous/other waste is being done as per Authorization obtained from RSPCB.
11.	NCBM will carry out a study on Hazardous waste utilization in cement kiln by December 2003.	Noted.
12.	Cement Industries will carry out feasibility study and submit target dated to CPCB for cogeneration of power by July 2003.	7.5 MW capacity WHR (Waste Heat Recovery) Systems has been installed.

Captive Power Plant

1.	Implementation of Environmental Standards (emission & effluent) in non- compliant* Power Plants (31 & 27) -Submission of action plan : June 30, 2003 - Placement of order for - Pollution of control equipment : September, 2003 - Installation & commission : December 31, 2005	Being complied with notified standards given by RSPCB & MoEF&CC i.e. 50 mg/NM3.
2.	For existing thermal power plants, a feasibility study shall be carried out by Central Electricity Authority (CEA) to examine possibility to reduce the particulate matter emissions to 100 mg/Nm3. The studies shall also suggest the road map to meet 100 mg/Nm3. The studies shall also suggest the road map to meet 100 mg/Nm3 wherever found feasible. CEA shall submit the report by March 2004.	Noted. Complying with existing emission standard stipulated by MoEF&CC & RSPCB.
3.	New / expansion power projects to be accorded environmental clearance on or after 4.1.2003 shall meet the limit of 100 mg/Nm3 for particulate matter.	Being complied. Complying with notified standards given by RSPCB & MoEF&CC i.e. 50 mg/NM3.

4.	Development of SO2 & NOx emission standards for coal based plants by December 2003. - New/ expansion power projects shall meet the limit of SO2 & NOx w.e.f. 1.1.2005. - Existing power plants shall meet the limit of SO2 & NOX w.e.f. 1.1.2006.	Noted, Complying with notified standards given by RSPCB & MoEF&CC.
5.	Install/activate opacity meters/ continuous monitoring system in all the units by December 31, 2004 with proper calibration system.	Complied, Opacity Meter and Online NOx & SOx analyzer installed at the stack attached with Captive Power Plant.
6.	Development of guidelines/ standards for mercury and other toxic heavy metals emissions by December 2003.	Noted and spot measurement is being done by NABL/MoEF&CC approved lab on annual basis for the stipulated parameters.
7.	Review of stack height requirement and guidelines for power plants based on micro meteorological data by June 2003.	Complied
8.	Implementation of use of beneficiated coal as per GOI Notification: Power plants will sign fuel supply agreement (FSA) to meet the requirement as per the matrix prepared by CEA for compliance of the notification as short term measure. Options/mechanism for setting up of coal washeries as a long term measure * Coal India will up its own washery * Sate Electricity Board to set up its own washery * Coal India to ask private entrepreneurs to set up washeries for CIL and taking washing charges * SEBs to select a private entrepreneur to set up a washery near pit- head installation of coal beneficiation plant	Noted
9.	Power plants will indicate their requirement of abandoned coal mines for ash disposal & Coal India/ MOC shall provide the list of abandoned mines by June 2003 to CEA.	100 % Fly ash generated in CPP is being consumed in-house in cement manufacturing.
10.	Power plants will provide dry ash to the users outside the premises or uninterrupted access to the users within six months	100 % Fly ash generated in CPP is being consumed in-house in cement manufacturing.
11.	Power Plants should provide dry flyash free of cost to the users.	Used in own cement manufacturing plant.
12.	State P.W.Ds/ construction & development agencies shall also adhere to the specifications/Schedules of CPWD for ash based products utilization MoEF will take up the matter with State Governments.	Noted

AMBUJA CEMENTS LIMITED
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Ambuja Cement

13.	New plants to be accorded environmental clearance on or after 1.04.2003 shall adopt dry flyash extraction or dry disposal system or Medium (35-40%) ash concentration slurry disposal system or Lean phase with hundred percent ash waste re-circulation system depending upon site specific environmental situation. (ii) Existing plants shall adopt any of the systems mentioned in 13 (i) by December 2004.	Noted
14.	Fly Ash Mission shall prepare guidelines/manuals for flyash utilization by March 2004.	Noted
15.	New plants shall promote adoption of clean coal and clean power generation technologies.	Noted

Arvind Singh
Sr. Manager – Environment

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Annexure-XI

28/2020

Transport Department ,Rajasthan

परिवहन विभाग

प्रदूषण नियंत्रण प्रमाण पत्र

POLLUTION UNDER CONTROL CERTIFICATE

[Approved by Department of Transport, Government of Rajasthan, Jaipur]

परिवहन विभाग राजस्थान सरकार से मान्यता प्राप्त

(Rule 115 of CMV Rules 1989)

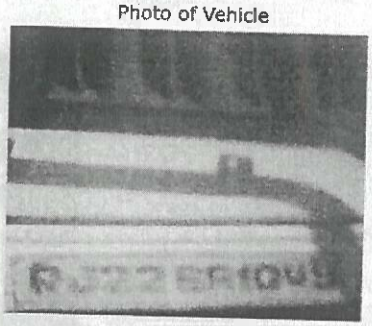
23

8875960

Pucc No :	D47RJ21111390
Vehicle No :	RJ22GA1049
Customer Name :	A,C.L
Customer Mobile :	9413225488
Year of Regn :	17-01-2007
Type of Vehicle :	D.VAN
Make :	Mahindra & Mahindra
Model :	PICK UP CBC
Test Date :	19-09-2020
Time :	12:33:36 PM
Valid UpTo :	18-03-2021
Center Name :	Veer Tejaji Mobile Puc Center
Center Address :	Khadakali,Gudhabhawadas,Nagaur
Licence No :	RJ21-48/47
Test Result :	Pass

VALID IN ALL INDIA

Photo of Vehicle



Flushing Cycle

Avg	RPM Min	RPM Max	Temp
	1310	3940	0

Sr. No.	RPM Min	RPM Max	Km	HSU%	Temp
1	1310	2336	0.000	00.0	000.0
2	1310	2487	0.503	19.4	000.0
3	1310	3237	0.000	00.0	000.0
Mean			0.167	06.4	

Prescribed Limit for Diesel vehicle	1/m(Light Absorption Co-efficient)	Hartridge Units (HSU)%
Free Acceleration BS II & III	2.45	65
Free Acceleration BS IV	1.62	50
Free Acceleration BS VI 4/3 wheelers	0.7 / 1.5	26 / 48

Validity Six Months for Bharat Stage III or below and one year for Bharat Stage IV/VI vehicles.

Certificate price: ₹ 100

Get Certificate renewed within the expiry date.

Seal of Testing Station	Testing Station Code	Authorised Signatory
	D47RJ21	

CERTIFICATE IS ONLY VALID IF SMS RECEIVED FROM REIL\TRANSPORT DEPT. KINDLY DESTROY THE INVALID CERTIFICATE.

Transport Dept. Govt. of Rajasthan

Veh Reg No : RJ22GA1049
PUC No. : D47RJ21111390
Valid up to : 18-03-2021
Scan QR Code to Validate

Transport Dept. Govt. of Rajasthan

Veh Reg No : RJ22GA1049
PUC No. : D47RJ21111390
Valid up to : 18-03-2021
Scan QR Code to Validate

Transport Department ,Rajasthan

प्रदूषण नियंत्रण प्रमाण पत्र
POLLUTION UNDER CONTROL CERTIFICATE

[Approved by Department of Transport, Government of Rajasthan, Jaipur]

परिवहन विभाग राजस्थान सरकार से मान्यता प्राप्त

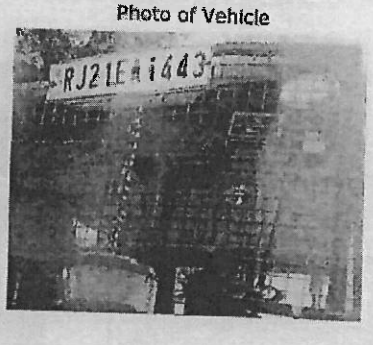
(Rule 115 of CMV Rules 1989)

887598

VALID IN ALL INDIA

Pucc No :	D47RJ21111509
Vehicle No :	RJ21EA1443
Customer Name :	RAM SUKH
Customer Mobile :	9929163917
Year of Regn :	19-07-2017
Type of Vehicle :	OTHERS
Make :	JCB
Model :	3DX
Test Date :	28-09-2020
Time :	11:02:26 AM
Valid UpTo :	27-03-2021
Center Name :	Veer Tejaji Mobile Puc Center
Center Address :	Khadakali,Gudhabhawadas,Nagaur
Licence No :	RJ21-48/47
Test Result :	Pass

Photo of Vehicle



Flushing Cycle

Avg	RPM Min	RPM Max	Temp
	649	1805	0

Sr. No.	RPM Min	RPM Max	Km	HSU%	Temp
1	697	1914	0.584	22.2	000.0
2	697	1776	0.596	22.6	000.0
3	697	1938	0.593	22.5	000.0
Mean			0.591	22.4	

Prescribed Limit for Diesel vehicle	1/m(Light Absorption Co-efficient)	Hartridge Units (HSU)%
Free Acceleration BS II & III	2.45	65
Free Acceleration BS IV	1.62	50
Free Acceleration BS VI 4/3 wheelers	0.7 / 1.5	26 / 48

Validity Six Months for Bharat Stage III or below and one year for Bharat Stage IV / VI vehicles.

Certificate price: ₹ 100

Get Certificate renewed within the expiry date.

Seal of Testing Station	Testing Station Code	Authorised Signatory
	D47RJ21	

CERTIFICATE IS ONLY VALID IF SMS RECEIVED FROM REILTRANSPORT DEPT. KINDLY DESTROY THE INVALID CERTIFICATE.

Transport Dept. Govt. of Rajasthan

Veh Reg No : RJ21EA1443

PUC No. : D47RJ21111509

Transport Dept. Govt. of Rajasthan

Veh Reg No : RJ21EA1443

PUC No. : D47RJ21111509

Annexure-XII

Ambuja Cements Limited, Unit: Rabriyawas

Status of last Public Hearing Issues as on 31.03.2021		
SN	**Public Hearing Issue**	**Implementation Status**
1	Opportunities for employment of local people due to Integrated Cement Project	Implemented.
2	Planning for Roof-Top-Rain water harvesting and water conservation	We already carried out detailed study of Roof Top Rain Water Harvesting Potential in Colony & Plant area, according to the recommendations in the report; storm water drainage system has been developed to cover the roof top as well as paved surface run-off water. Further storage / ground water recharge structure are being developed in phased manner.
3	Problem of water scarcity is being faced by villagers now-a-days	We supply drinking water as per need of surrounding villagers by tankers during water scarcity.
4	Pollution while transportation of Limestone extracted from Ras I Mine	Limestone coming out of Ras-I mine is being transported in covered trucks. Water sprinkling is being done on roads to control air pollution.
5	Pollution impact of this expansion project on Agriculture and environment	ACL is maintaining all emission standards within the limits prescribed by CPCB/SPCB.
		No waste water is generated from the cement plant & mine and ACL is maintain "zero discharge".
		Solid waste generated from Ras I Mine as inter-burden is dumped in the non – mineralized zone of the ML area with proper terracing, which is stabilized by plantation.
		Green belt is being developed all around the ML area.
		Thus, there is no impact of expansion project on agriculture
6	Management of Over- burden in Ras - I Mine	No over burden is generated from Ras – I Mine except small quantity of inter burden generation.
7	Provisions made for blasting in proposed mining project in Kotidiya and for the damage that may be posed to the properties of villagers.	Noted
8	Planning about Women employment and Social- Development plans and participation of women in rural development under taken by Ambuja Cement Ltd.	Expansion of rural developmental projects/ Programmes are being done and the participation of women's for the rural development is promoted and the development of women is being ensured.

Environmental Policy

Ambuja Cement

Annexure - XIII

Framework

The Ambuja Cements Limited's Environmental policy is an integral part of the Ambuja Cement policy landscape. This policy should be read in close conjunction with the Ambuja Cement policies and directives listed in Annex 2.

The Environmental policy comprises:

- Scope
- Environment Policy
- Annex 1: Responsibilities
- Annex 2: Ambuja Cement policies and directives related to the Environmental policy

1. Scope

The scope of the Ambuja Cement Environmental Policy covers Ambuja Cements Ltd. and all its operations ("Ambuja Cement").

2. Environment Policy

Concern and consciousness towards environment are embedded in our Environmental Policy which covers all our functions & operations. The structure, process and monitoring have been significantly reshaped in past few years, keeping in view the need of the time and the Company's objectives towards Corporate Sustainability. The effective execution and adherence to the policy principles are accorded high importance in the agenda of the Board of the Company. We commit to:

- Adopt environmentally safe mining and process technologies along with best operating practices for prevention & control of risks and adverse effects of the release of our pollutants to the environment (air, water, and soil) so as to protect health and safety of our employees, contract employees, and community.

- Appropriately rehabilitate/restore/reclaim mines or disturbed areas for overall benefit to community and biodiversity. Quarry rehabilitation plan will be in place for all extraction sites. A Biodiversity Management Plan will be prepared for all extraction sites according to the level of management needed based on the risks and opportunities.

- Optimise use of key resources including minerals, energy, and water.

- Conduct environmental and social impact assessment in selection of greenfield sites or major modifications in the existing sites.

- Conduct analysis of impacts our products and solutions through the Life Cycle Assessment.

- Reduce our impact on climate change by developing, manufacturing or promoting sustainable products and solutions, undertaking energy efficiency and recovery, use of renewable and non-conventional sources of energy, and utilising alternative raw materials and fuels.

- Comply with applicable legal and other requirements including environment and forest clearances, consents, permits, licenses, standards, and leading industry initiatives.

- Implement and maintain environment management systems all across our operations along with monitoring, reporting and continually improving our environmental performance.

- Be reliable provider of sound waste management solutions by co-processing qualified wastes as alternative fuels and alternative raw materials from other industries and waste service providers.

- Promote sustainable water management practices, including efficient water consumption, recycling, treatment and zero wastewater discharge, across all our operations, along with rainwater harvesting to minimize freshwater withdrawal.

- Assess the environmental practices and policies of our critical suppliers as part of selection process and expect them to respect and comply with our environmental policies and procedures.

- Develop and propagate environmental awareness amongst employees and other stakeholders including surrounding communities.

- Set corporate objectives and targets, and monitor our environmental performance.

- Conduct environmental due diligence of all new acquisitions.

- Be open, transparent, and accountable to our stakeholders regarding our environmental performance and periodic reporting. This policy will be communicated to all persons working for or on behalf of the company and will also be made available on the website of the company.

This Policy was approved by Executive Committee of the Company on 20th March 2017 and will come into force on 21st March 2017.

Original dated: 20th March 2017	Revision Dates:
Version dated: 20th March 2017	
Responsible Executive Committee Members: Vilas Deshmukh, Chief Manufacturing Officer Responsible Person Name/ Title: Sandeep Shrivastava, Head Corp Environment and Sustainability	

Annex 1: Responsibilities

1. Organisational structure, roles and responsibilities

1.1. Ambuja Cement Executive Committee:

- The Executive Committee approves creating, changing or suspending this Environmental Policy.

- The Chief Manufacturing Officer is the Executive Committee member responsible for Sustainable Development who submits the creation, changes or suspension of this Environmental Policy to the Executive Committee for approval.

1.2. Corporate Function – Environment and Sustainability:

- Proposes amendments to this Policy and associated procedures / guidelines where and when necessary.

- Assists Units (Plants/Operational Sites) in understanding and applying the Environmental Policy and Directives.

- Supports training on the Environmental Policy and Directives.

- Assists Units in solving serious environmental compliance issues and other significant environmental issues.

- Collects feedback from Units with regard to amendments of the Environmental Policy and Directives

- Head (Corp Environment and Sustainability), reporting to the Chief Manufacturing Officer, is responsible for all the activities and to oversee fulfilment of requirements for compliance, co-ordination with environment managers and Unit Heads at respective sites of operation who are directly responsible for ensuring compliance at their respective sites.

1.3. Corporate Sustainability Steering Committee (CSSC):

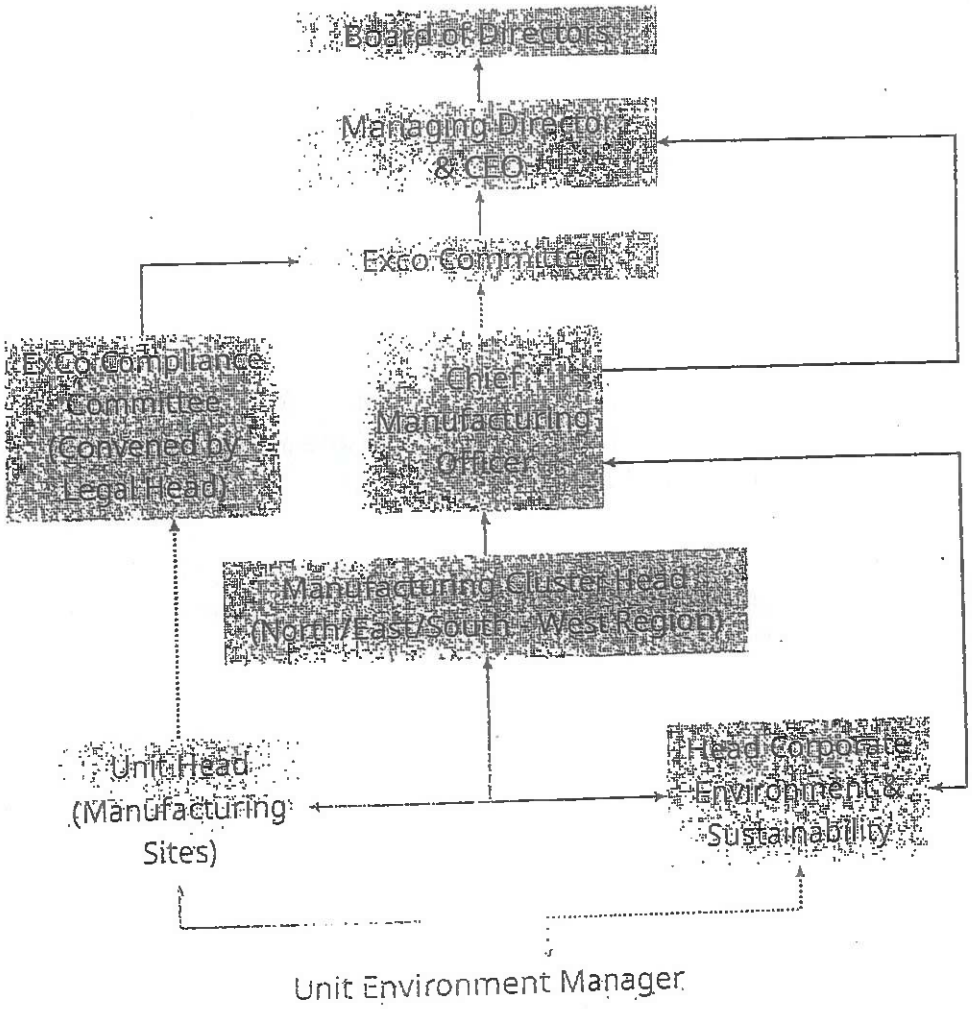
The Corporate Sustainability Steering Committee reviews the overall sustainability performance and initiatives as well as any potential amendments to the Policy and associated Directives proposed by the Corporate Environment and Sustainability/ other function before submission to the CMO/ Executive Committee.

Annex 2b: Ambuja Cement Directives related to the Environmental policy

Link to The Environmental Policy	Directive
All LH /ACL Directives	LH Cement Environment Directive LH Water Directive LH Quarry Rehabilitation and Biodiversity Directive

1.4. Unit / Plant Management:

Unit or plant environmental managers support training on and implementation of the Environmental Policy, Legislation and Directives at the respective unit or sites. They share good practices within their units and promote environmental success stories at Company level. Unit head (UH) ensures that Environment Policy is implemented as per the planned procedure. UH provides all resources to environmental function so that the system of compliance is operated efficiently. UH reports to respective Manufacturing Cluster Head of the organisation who in turn reports to the Chief Manufacturing Officer (CMO), on all important environmental issues including Compliance of Environment/ Forest/ Wildlife and Clearances.



1.5. Other Functions:

Implementing the Environmental Policy requires cooperation with the following functions in particular: Manufacturing (including Cluster Heads at regional level) , Legal/Compliance, Internal Audit, Procurement, Finance, Marketing, Risk Management, Health and Safety, Techport, Geocycle, Corporate Affairs, CSR, and Communications.

Exco level Compliance Committee takes a stock of compliance confirmation/ non-compliances regarding all the legal requirements applicable to ACL (including environmental). Head-legal on a quarterly basis presents compliance confirmation to the Board level Compliance Committee headed by an independent Director.

The organisation structure for implementation of Corporate Environmental Policy is as under:

2. Company Level Responsibility

2.1. Company MD and CEO

MD and CEO, at the helm of affairs, is responsible for making sure that Company Environmental Policy fully integrates the principles of the LafargeHolcim Environmental Policy.

He / she delegates responsibilities for implementing initiatives and programs pertaining to this Policy to the concerned functions / persons within the Company.

The MD and CEO is ultimately responsible for implementation of Environmental Policy and for ensuring the conformity.

Annex 2a: Ambuja Cement Policies related to the Environmental policy

Link with Policy	Sustainability Policy CSR Policy Climate Change Policy Green Procurement Policy Health & Safety Policy

Annexure- XIV

Ambuja Cement

Noise Level Monitoring Report of Cement Plant for the Month of OCTOBER '2020

1. Ambient Noise Level:

S. No.	Location	Date of Monitoring	Noise Level in dB (A)	
			Day	Night
1	At SWRP	12.10.2020	58	50
2	Near Lime stone Crusher (Old)	12.10.2020	67	60
3	Old Weigh Bridge (Near Mines Office)	12.10.2020	70	62
4	SW End of CPP Boundary (Near Ballada Gate)	12.10.2020	60	52
5	Near Colony Gate	12.10.2020	58	50

Lab. Incharge (Env.)

F03 (09-10)/19

AMBUJA CEMENTS LIMITED
UNIT – RABRIYAWAS
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Ambuja Cement

Noise Level Monitoring Report of Cement Plant for the Month of NOVEMBER '2020

1. Ambient Noise Level:

S. No.	Location	Date of Monitoring	Noise Level in dB (A)	
			Day	Night
1	At SWRP	13.11.2020	59	52
2	Near Lime stone Crusher (Old)	13.11.2020	68	62
3	Old Weigh Bridge (Near Mines Office)	13.11.2020	70	61
4	SW End of CPP Boundary (Near Ballada Gate)	13.11.2020	62	52
5	Near Colony Gate	13.11.2020	59	49

Lab. Incharge (Env.)

F03 (09-10)/19

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Ambuja Cement

Noise Level Monitoring Report of Cement Plant for the Month of December '2020

1. Ambient Noise Level:

S. No.	Location	Date of Monitoring	Noise Level in dB (A)	
			Day	Night
1	At SWRP	15.12.2020	58	50
2	Near Lime stone Crusher (Old)	15.12.2020	69	62
3	Old Weigh Bridge (Near Mines Office)	15.12.2020	70	60
4	SW End of CPP Boundary (Near Ballada Gate)	15.12.2020	64	52
5	Near Colony Gate	13.11.2020	60	50

Lab. Incharge (Env.)

F03 (09-10)/19

AMBUJA CEMENTS LIMITED
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Works: PO Rabriyawas, Tehsil – Jaitaran, Dist. – Pali (Raj.) 306 709
Tel: 02939 288011-18, Fax: 02939 288030
CIN: L26942GJ1981PLC004717 Website: www.ambujacement.com
(Registered Office: PO – Ambujanagar, Taluka – Kodinar, Dist. – Gir Somnath (Guj.) 362 715)

Ambuja Cement

Noise Level Monitoring Report of Cement Plant for the Month of January '2021

1. Ambient Noise Level:

S. No.	Location	Date of Monitoring	Noise Level in dB (A)	
			Day	Night
1	At SWRP	15.01.2021	59	52
2	Near Lime stone Crusher (Old)	15.01.2021	68	63
3	Old Weigh Bridge (Near Mines Office)	15.01.2021	69	62
4	SW End of CPP Boundary (Near Ballada Gate)	15.01.2021	63	52
5	Near Colony Gate	15.01.2021	58	50

Lab. Incharge (Env.)

F03 (09-10)/19

AMBUJA CEMENTS LIMITED
UNIT – RABRIYAWAS
Works: PO Rabriyawas, Tehsil – Jaitaran, Dist. – Pali (Raj.) 306 709
Tel: 02939 288011-18, Fax: 02939 288030
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Ambuja Cement

Noise Level Monitoring Report of Cement Plant for the Month of February '2021

1. Ambient Noise Level:

S. No.	Location	Date of Monitoring	Noise Level in dB (A)	
			Day	Night
1	At SWRP	12.02.2021	59	53
2	Near Lime stone Crusher (Old)	12.02.2021	67	62
3	Old Weigh Bridge (Near Mines Office)	12.02.2021	68	62
4	SW End of CPP Boundary (Near Ballada Gate)	12.02.2021	63	53
5	Near Colony Gate	12.02.2021	59	52

Lab. Incharge (Env.)

F03 (09-10)/19

AMBUJA CEMENTS LIMITED
UNIT – RABRIYAWAS
Works: PO Rabriyawas, Tehsil – Jaitaran, Dist. – Pali (Raj.) 306 709
Tel: 02939 288011-18, Fax: 02939 288030
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Ambuja Cement

Noise Level Monitoring Report of Cement Plant for the Month of March '2021

1. Ambient Noise Level:

S. No.	Location	Date of Monitoring	Noise Level in dB (A)	
			Day	Night
1	At SWRP	15.03.2021	58	52
2	Near Lime stone Crusher (Old)	15.03.2021	66	62
3	Old Weigh Bridge (Near Mines Office)	15.03.2021	67	63
4	SW End of CPP Boundary (Near Ballada Gate)	15.03.2021	64	54
5	Near Colony Gate	15.03.2021	58	52

Lab. Incharge (Env.)

F03 (09-10)/19

AMBUJA CEMENTS LIMITED
UNIT – RABRIYAWAS
Works: PO Rabriyawas, Tehsil – Jaitaran, Dist. – Pali (Raj.) 306 709
Tel: 02939 288011-18, Fax: 02939 288030
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Annexure- XV

SOCIAL BENEFITS:

Proposed expansion project will result in growth of the surrounding areas by increased direct and indirect employment opportunities in the region including ancillary development and supporting infrastructure. Beside this, Royalty and other taxes are/ would be additional benefitand it is being/ will be utilized by local administration for the development of socio-economic infrastructure and wellbeing of the local population.The various activities proposed through CER (Corporate Environment Responsibility) would help in upgradation of basic infrastructure, amenities. Details of various CSR/ESC Activities carried out are given below:

Table 1.1

SL	Particular	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1.	Water resource Management	157.88	159.07	176.65	175.30	189.37	184.10	180.31	117.88	82.81	48.50
2.	Agricultural development	23.89	28.26	28.50	22.80	31.04	31.12	28.28	33.29	40.04	36.01
3.	Health, Sanitation, and women Empowerment	32.81	33.30	30.60	21.15	23.20	22.94	11.57	11.79	10.26	9.01
4.	Rural Infrastructure	82.16	138.84	144.0	116.30	134.03	122.24	179.75	161.71	149.53	120.00
5.	Skill Development	20.40	26.70	32.04	31.77	34.79	42.10	50.63	54.14	46.78	39.35
6.	Overheads	43.50	58.10	64.90	54.30	60.40	68.45	80.10	80.44	77.00	75.00
	Total	**360.64**	**444.27**	**476.69**	**421.62**	**472.83**	**470.95**	**530.64**	**459.29**	**406.52**	**327.87**

CSR/ESC Expenditure of Past Five Years (Rs. In Lakhs)

Rabriyawas location is surrounded by hills and sand all around the place and comes in semi-arid region of western Rajasthan. With highly uncertain rainfall in this area, people are majorly dependent of the ground water for their daily use. Sometimes drought and sometimes flood make this area highly risky for crops and people as well. This leads to this that people having water sources available like tube well or dig well can cultivate the Kharif season crops easily, rest others are majorly dependent on the Rabi season crops only. Community is majorly dependent on agriculture and allied activities for their livelihood and most of the land is rain fed, so community facesmany problems like drinking water, health issues, irrigation, and low agricultural productivity.

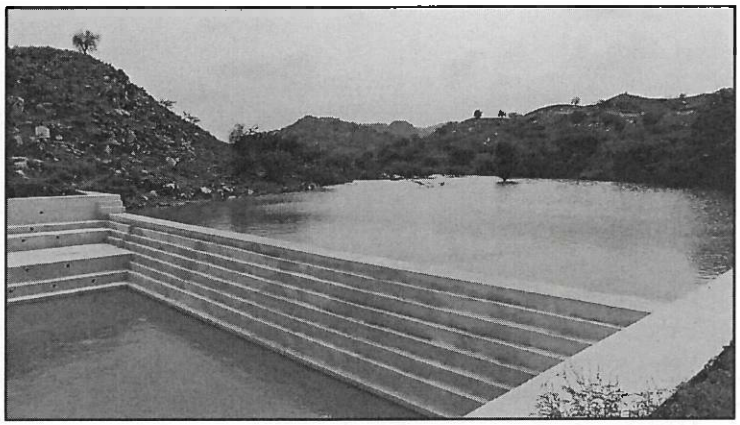
Water Resource Management

Management of water resource is the major concern in this area. The average rainfall in western Rajasthan is just 300-350 mm per year. Ground water in some part of the area is also affected by higher concentration of dissolved salts and fluoride. Famines are frequent, often causing mass migration of populations. The soil condition is extremely poor and mainly characterized by sandy and sandy loam. This has an adverse impact on drinking water security and water for irrigation in the area.Traditionally, the community in theregion has always depended on village ponds and open dug wells for their drinking water; and agriculture is mainly seasonal and rain fed. When rainfall is less, it is even difficult for the farmers to save their Kharif (monsoon) crops too. There is no facility to provide support irrigation. The overall impact of lack of water reflected on all aspects of people's lives. ACF began its intervention in

WRM in the region in the year 2006 through a participatory approach and supported the active revival of traditional water conservation methods to raise the water level and build access to quality water throughout the year.

ACF is applying following approach for water availability in Area for drinking purpose as well agriculture purpose.

A. Construction of water harvesting structure for development of water Resource-



ACF used a multi-pronged approach to address the issue of WRM in the region; undertaking various activities based on the village needs, and geographical conditions. Our activities included a revival of traditional water harvesting systems, as well as integrating innovative water management systems to enhance water bodies in the region. With the regular discussion with community and then further assessing how to promote new technologies to address the water for irrigation in the arid region with sandy bed rivers and Nalas. We have tested two new soil and water conservation structures in the area - the innovative SubsurfaceDykes and Khadin Cultivation, a traditional Runoff Farming System.

Given the limited and very scare rainfall in the area, there is need to harvest the runoff/ surface water as much as possible through construction of series of Check dams in the streams and rivers. ACF has already implemented pilots in the project area and analyzed the impact, results in terms of surface water storage as well as recharging the nearby wells for the drinking purpose.

Long dry spells in the area have always resulted in huge quantity of crop losses. To address this issue, ACF has replicated the model of farm pond on the farmer`s land.

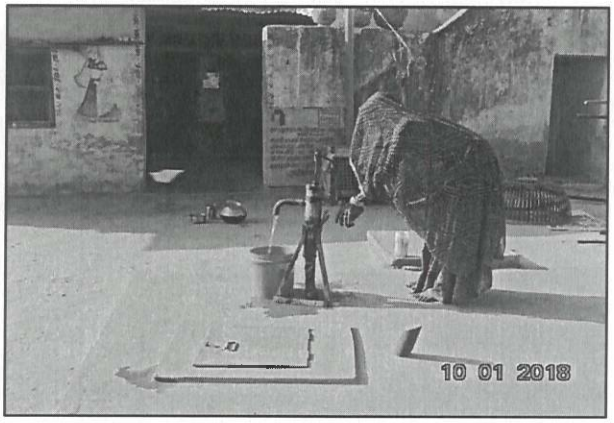
Name of Structure	No. of Structures developed	Water harvesting Capacity Created
No. of Check Dams	44	60.59MCFT
No. of Dykes	22	184.17 MCFT
No. of Khadins	35	92.67MCFT
No. of Pond Deepening	191	85.00 MCFT
Farm Bunding	875	1725.15 Ha.
Farm Ponds	56	5.19 MCFT
Total no. of Structures	**1223**	**427.62 MCFT &1725.15 Ha.**

Drinking Water Security

For availability of safe and potable drinking water ACF has taken many initiatives in Rajasthan some of the key initiatives are as follows-

- Roof top Water Harvesting Structures (RRWHS)
- Drinking Water Distribution System (DWDS)
- Drinking Water Sources –Ponds/wells/Hand pumps

Roof Rainwater Harvesting System-



The poor families whose livelihood mainly depends on daily wages or agriculture labor are not in position to construct RRWHS in their houses because of high initial cost which is about Rs 3.5/liter. In our operational area 12-15 % families in each village do not have RRWHS due to poor economic condition.

In that situation to cover marginal and small families provided technical & financial support by ACF and rest expenses they can contribute like labor and mason. For a family of 4-5-person, 12,000-liter capacity RRWHS is sufficient for drinking purpose and it needs about 40 sqm catchment area to fill.

Ambuja Cement Foundation Rabriyawas Promoted 2099 RRWHS in Project villages for marginal & small farmer families.

Drinking Water Distribution System-

Ambuja Cement Foundation is committed for drinking water availability to each Household within range of 200M. This is the part of our water security mission for this we have installed drinking water distribution system owned by community.

This program is piloted from two villages of Rabriyawas location to be scaled up in coming years. At present all families of Patan and Kesarpura villages are having water availability within 200M they have taken the responsibility to maintain and sustain it further.

Six DWDS Installed in two villages and benefitting more than 2000 peoples and their cattle's.

Drinking water sources -Ponds/wells/Hand pumps

Traditionally community of Rural Rajasthan drink water directly from ponds or digging wells inside the pond. For this purpose, ACF is continuously engaged in creating, revival and deepening of village pond to ensure water availability for all. These ponds also help in ground water recharging which create positive impact on availability of water in nearby wells, tube wells and hand pumps. ACF also supports community in repairing and maintaining the hand pumps and has also revived many wells in project villages of Rajasthan.

ACF has revived/created 191 village ponds having water storage capacity of 85.00 MCFT

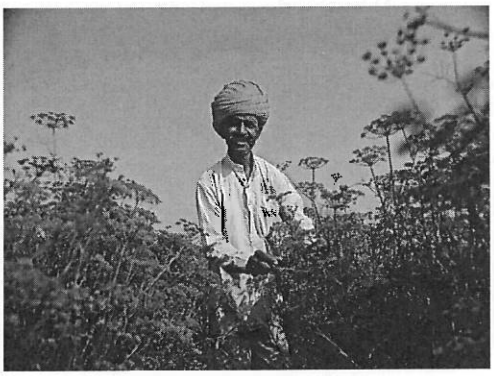
A. Water use Efficiency

In the scarcity of water use of water in efficient way is equally important to water harvesting and storage works. To promote effective utilization of available water in agriculture micro-irrigation system i.e.-Drip irrigation system and sprinkler system is being promoted by AmbujaCement Foundation.

By using Micro-Irrigation System cultivation area is increased and better production can be gained. Drip Irrigation system uses seven times lesser water than other irrigation techniques.

ACF Promoted Micro-Irrigation system in1436.46 Ha with 636 Farmers

Agricultural Development



ACF's Vision for Agriculture Program in Rajasthan- "Ensuring 12 months food sufficiency to farmer & doubling their income by 2020"

- Promoting Vegetable cultivation Program with 457 farmers in 617.08 Acre in Project Area
- Promoting Wadi Development Program with 74 farmers in 153.76 Acre in Project Area

- Promoting Improved Crop Management Program with 3244farmers in 29424 Acre in Project Area
- Capacity building program are being organized in Animal Husbandry Program with 2641 Households.
- Organized veterinary camps in project village
- Promoting Farmer groups and farmer producer organization in villages for sustainable development.
- One more initiative taken by ACF to promote the Balaji Farmer Produce company which is engaged in Biomass supply business and as of now has supplied **117993** MT biomass to Ambuja Cement Ltd. Around 2600 farmers are engaged in Balaji farmer producer company.

Women Empowerment

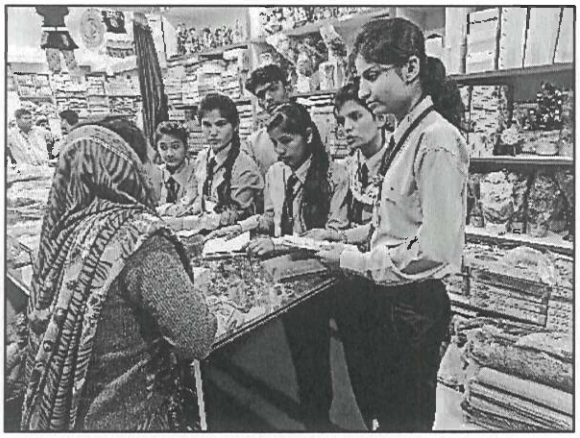
Women's empowerment is crucial to sustain various community development programmes. It is a proven fact that attitudinal changes on the part of women have an impact on the attitudes of their families and communities.

- Strengthening Economic and Social status of women by Promoting Self Help Groups
- Establishing sustainable apex institution of women led SHGs
- Promoting Income Generation Activities with SHGs to improve their livelihood and their daily earnings.

ACF supports over 54 self-help groups with 587 women members across three locations in Rabriyawas with cumulative corpus of over Rs.34.00 lakh. Today, these groups have gone beyond their simple monthly savings, and built linkages with banks providing technical support to start their own entrepreneurship leading to sustainable livelihoods. These SHGs are now participating in the social activities of the villages, be it the proposal for the revival of ponds, improving the health facilities in the villages.

Skill Development (SEDI)

SEDI is a functional structure to promote productive employment and micro-enterprise. SEDI offers short, intensive courses in various trades that aim to achieve sustainable livelihood by strengthening youth's technical and functional skills.
The emphasis of a skill training program is on the unemployed youth to provide them with an opportunity of education in a skill that would ensure



adequate livelihood opportunity. The target age group of the program is between 18-30 years, ranging from the high school drop-out and unemployed youth to the ones already working aspiring to upgrade their skills. A strong belief is in coalesce of skill training backed by life skills which will enable the participants live a healthy and productive life.

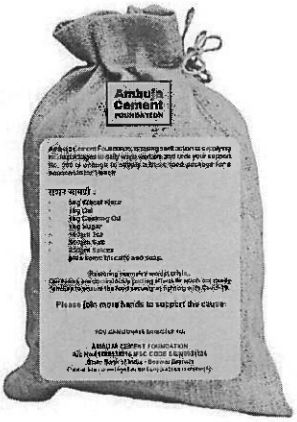
Objective-

- To bridge the gap of skills required in an economy by enabling an access to skill training opportunities
- To encourage the entrepreneurial spirit among the local youth by way of hand holding & facilitating in setting up of an enterprise
- To promote holistic growth of the participants with life skills to support improved quality of life

Trained 6985 youth in SEDI Jaitaran with 74% placement. Trainees are successfully placed in different sectors like-Retail and sales, office assistant, Microfinance, Beautician etc. Female participation is 32.21% in trained youths.

Health & Sanitation:

ACF comprehensive health care programme emphasizes on an integrated approach to health, wherein development issues like water, sanitation, roads, livelihood, nutrition and education which determine village health, are given equal attention.



- ACF provide primary care through mobile health dispensary in seven neighboring project villages.
- From past 2 months ACF is practicing tele-medicines in the 2 villages and has covered around 105 patients till date.
- During the COVID pandemic ACF has distributed 16000 masks, 500 sanitizer, ration packets to 1500 poor., awareness campaigning through jeep announcements, SMS, images, and videos through online platforms like whatsapp and 20 wall painting in 5 villages.
- ACF Organize medical health camps General/special in twelve core project villages.
- HIV/AIDS awareness program with RSACS for employee as well as community and with the truckers and allied transporters.
- Supporting & Strengthening AAA model to improve MCH services in 56 Anaganwadis with 12693 HHS.
- Covered 78% HHs in our project area for sanitation facility with proper utilization of toilets. Under Swatch Bharat Mission. Now all five-gram panchayats declared ODF by

Government. Presently we are re-surveying the core villages for the use and availability of toilets under Swachh Bharat Mission II phase.

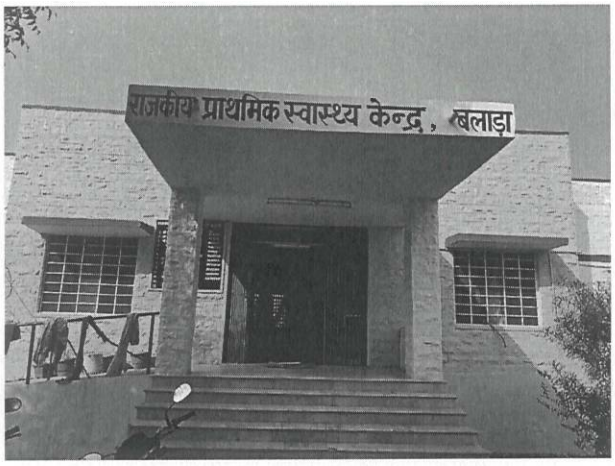
- We are improving the government infrastructure like development of Anganwadi, support in PHC & CHC of our core villages.

Infrastructure Development

For the development of village ACF is also providing following infrastructure support in community in project villages.Construction of Cement Concrete/Gravel Roads.

- Repair & Development of community halls.
- Village electrification work by providing street lights and Installing High Mast Lights on the main cross roads of the villages.
- Securing the villages with installation of WiFi and IP enabled CCTV surveillance system.

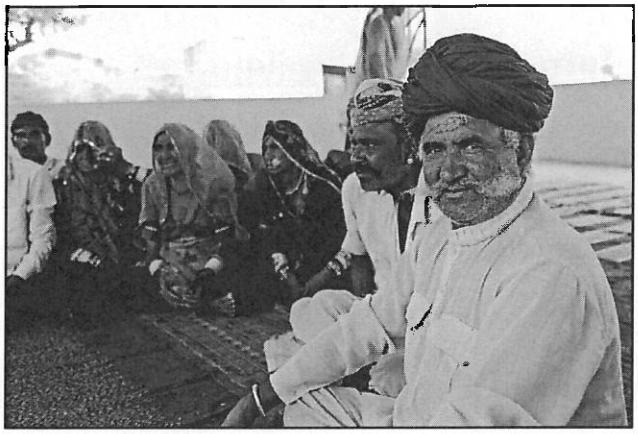
- Modification and development of Anganwadi Centers by providing the TLM material and educational paintings at 6 AWC till March 2021.
- Modification and Development of Balada PHC with IEC painting for the staff and patients and community members so as to aware about different health related schemes and precautionary measures to be taken to avoid getting sick.



- Repair & Goshala Development and construction of cattle drinking water points.
- ACF has been working on promoting clean and renewable energy sources through its initiatives in Rabriyawas.
- Support for cultural program in the community.

Community Based Event

- **Community Advisory Panel (CAP) -**Involving **community leaders** and **Key departments heads** to discussion on Key Issues i.e. –Impact and feedback of CSR initiative, Future needs and convergence between Govt. scheme and ACF program under the **Community Advisory Panel**(CAP) meeting



- **Social Engagement Scorecard (SES) -** Involving **Opinion Leaders andACLdepartments** through **Social Engagement Score Card** Exercise to get the community feedback.
- **Unit Sustainable Steering Committee (USSC) -** Involving **various departments** for discussion on the various plant sustainability issues under the **USSC** meeting.
- Volunteer Activities-Involving **Company Employees and community** for safety awareness through **Volunteerism**programme.
- **Village Development Committee-** Formed village development committee for raising development issue of village and for sustainable development of village.
- **Workshops-** Organize workshops on different issues of development like-Water, Skill, and Agriculture, Health etc. at state and national level.

Annexure- XVI

LABORATORY EQUIPMENT AVAILABLE WITH ENVIRONMENTAL MANAGEMENT DIVISION – ACL, RABRIYAWAS

Sr. No.	EQUIPMENT NAME	MODEL	Nos.	MAKE
01.	CAQM station along with weather monitoring kit	Sonimix 3022 EN Series	01	Environment-SA
02.	CEMS	OMD41, MCS100E HW	01	Dust Monitor: Sick Maihak Gas Analyzer-Chemtrol
03.	RDS (Respirable dust sampler)	APM 460 & DX APM-460 BL	06	Envirotech Instruments Pvt. Ltd.
04.	Fine particulate sampler (Combo PM 10 & PM 2.5 sampler)	Ecotech AAS 271	02	Envirotech Instruments Pvt. Ltd.
05.	HVS (High Volume Sampler)	APM-415	01	Envirotech Instruments Pvt. Ltd.
06.	Stack Monitoring Kit	APM-620	02	Envirotech Instruments Pvt. Ltd.
07.	Stack Velocity Monitor	APM-602	01	Envirotech Instruments Pvt. Ltd.
08.	Handy Sampler	APM-821	01	Envirotech Instruments Pvt. Ltd.
09.	Personal Sampler	APM-800	02	Envirotech Instruments Pvt. Ltd.
10.	Sound Level Meter (SLM 100)	30-DTI-2008	01	EPIL
11.	Flue Gas Analyzer	KM-9106	01	Kane International
12.	Diesel Smoke Meter	Opax 2000 II/ DX 200 P	01	Neptune Equipment Pvt. Ltd.
13.	Infrared Exhaust Gas Analyzer	TD 240/ EGA 200	01	Neptune Equipment Pvt. Ltd.

14.	Weather Monitoring Instruments: Anemometer Wind Van Air Temperature Relative Humidity Rain Gauge Data Logger	 DWA 86000 DWD 8601 DWT 8102 DTH 8103 RRR 100P DL 1002	 01 01 01 01 01 01	Dyanalab
15.	Online Opacity Meter	OMD/41-02	07	Sick
16.	Spectrophotometer	Spectronic 20 Genesys	01	Spectronic Instruments
17.	Pressure Manometer	C-9553	01	Comark
18.	Refrigerator 165 L	Classic Del	01	Godrej
19.	Hot Air Oven	BPI 9 & 10	01	Ambassador
20.	BOD Incubator	BPI 34	01	Ambassador
21.	COD Reflex Apparatus		01	Ambassador
22.	Muffle Furnace		01	Ambassador
23.	Water Bath	BPI 22	01	Ambassador
24.	Balance 0.1 mg	Series XB	01	Precisa
25.	pH Meter	335	01	Systronics
26.	TDS – Conductivity Meter	308	01	Systronics
27.	Hot Plates		06	Ambassador
28.	Separating Funnel		02	Borosil
29.	CO Sampler (Ambient)	GaZguard TX	01	Pollution Protection System
30.	Monitoring Van	Bolero LX	01	Mahindra & Mahindra

Annexure- XVII

Annexure- XVII

Ambuja Cement

Registered A/D

No.: ACL/EMD/F-25

September 21, 2020

To,

The Member Secretary,
Rajasthan State Pollution Control Board,
4th, Institutional Area, Jhalana Doongri,
Jaipur – 302 004 (Rajasthan)

Sub: Submission of Environmental Statement Report (Form V) For our **Ras - I Limestone Mines for period April 2019- March 2020.**

Dear Sir,

Please find enclosed herewith the Environmental Statement Report for the period ending March 2020 in Form V for our Ras - I Limestone Mines.

Trust the above is in order.

Thanking you,
Yours faithfully,

For **Ambuja Cements Limited**
Unit: Rabriyawas

Arvind Singh
Sr. Manager - Environment

Copy: Regional Officer, Rajasthan State Pollution Control Board, SA- 6, Mandia Road Industrial Area, Pali

AMBUJA CEMENTS LIMITED
UNIT – RABRIYAWAS
Works: PO Rabriyawas, Tehsil – Jaitaran, Dist. – Pali (Raj.) 306 709
Tel: 02939 288011-18, Fax: 02939 288030
CIN: L26942GJ1981PLC004717 Website: www.ambujacement.com
(Registered Office: PO – Ambujanagar, Taluka – Kodinar, Dist. – Gir Somnath (Guj.) 362 715)

FORM – V

Environmental statement for the financial year ending the 31st March 2020 for Ras - I Limestone Mines

PART – A

(i) Name and address of the owner / occupier of the industry operation or process : **Sh. Sumeet Chadha**
Unit Head
Ambuja Cements Limited
Post & Village:- Rabriyawas,
Tehsil: Jaitaran
Distt.: Pali (Rajasthan) – 306 709

(ii) Industry Category Primary (SIC Code) : Primary

(iii) Production capacity – Units - : 0.279 MTPA

(iv) Year of establishment : December 11, 2012

(v) Date of last environmental statement submitted : 30.09.2019

PART – B

WATER AND RAW MATERIAL CONSUMPTION:

1. Water consumption m^3/d

Process/Spraying in mine pits	26.06 m^3/day	7820 m^3 / Year
Domestic	0.20 m^3/day	≅ 61m^3 / Year

Name of products	Process water consumption per unit of product output	
	During the previous financial year	During the current financial year
(1) Limestone (MT)	0.004 m^3/MT	0.036 m^3/MT

2. Raw material consumption:

	Name of raw materials	Name of products	Consumption of raw material per unit of output	
			During the previous financial year	During the current financial year
	N.A.	N.A.	N.A.	N.A.

PART – C

Pollution discharged to environment / units of output
(Parameter as specified in the consent issued)

(1)	Pollutants	Name of Location	Quantity of pollutants discharged (Kg. / day)	Concentrations of pollutants in discharged (mg / Nm^3)	Percentage of Variation from prescribed standards with reasons
(a)	Water	NA	No effluent generated from mining activity		NA
(b)	Air	NA	NA		NA

PART – D
HAZARDOUS WASTES

(As specified under Hazardous waste under the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008)

Hazardous Waste	During the previous financial year	During the current financial year
a) From Process	Not Applicable	Not Applicable
b) From pollution control facilities	Not Applicable	Not Applicable

PART – E
SOLID WASTES

	Total quantity (MT)	
	During the current financial year(18-19)	During the current financial year(19-20)
a) From Process (Mining rejects)	0	0
b) From pollution control facilities	Not Applicable	Not Applicable
c) (1) Quantity recycled or re – Utilized within the unit.	Not Applicable	Not Applicable
(2) Sold	Not Applicable	Not Applicable
(3) Disposed	35574	9517

PART – F

Please specify the characteristics (in terms of composition & quantum) of hazardous as well as solid wastes & indicate disposal practice adopted for both these categories of wastes.

Solid Waste (Inter burden & west rock) - generates during the mining are basically those rocks, which is found inter bedded with limestone beds in their natural occurrence.

The dumping of such as wastes are made in specified areas earmarked for dumping as per approved Mining plan under MCDR 1988 as proved non mineralized zone. The dumps are to be converted into green belt and terraced.

Rock Types	SiO_2	Al_2O_3	Fe_2O_3	CaO	MGO	LOI
Pegmatites	71.54	15.34	3.26	2.52	0.6	2.82
Schists	54.87	11.79	4.05	15.22	0.97	11.48
Interstitial	18.62	7.46	2.00	37.80	0.70	31.56
Clay Sands	77.80	8.50	1.00	1.80	1.30	3.60

PART - G

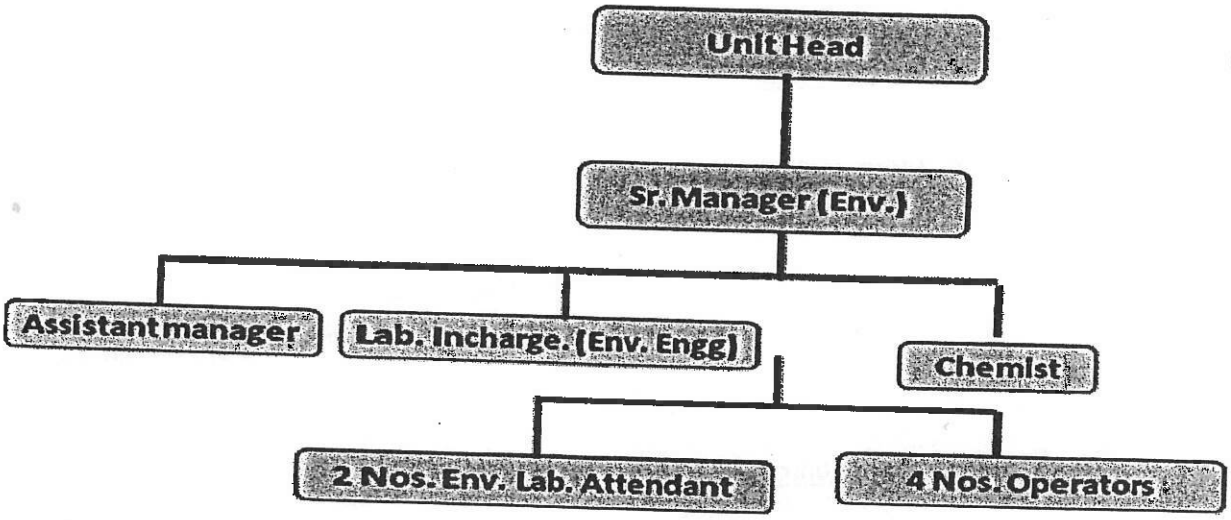
Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production.

The pollution control measures taken like sprinkling of water in the crusher, belt conveyors and on the haulage road as well as water injecting system in drill machines have a direct impact on the conservation of natural resources as well as on the cost of production. Some of them are enumerated below.

1. Environmental Management Division: -

The Environmental Management Division (EMD) of Ambuja Cements Limited (ACL) has experts in the field of environmental management from different disciplines. This division is also supported by sufficient qualified staff for maintenance of pollution control equipment from civil, Mechanical, Automation & Control and Electrical Depts. Company has full-fledged Horticulture department with staff qualified on forestry and horticulture.

Organization Structure for Environment Management Division



2. Environmental Laboratory:

Set up Two Environmental Laboratories with modern sophisticated equipments for collection and analysis of Air, Water & Waste water samples under the supervision of the Environmental Management Division. A list of laboratory equipments is as follows:

S. No.	Name of Equipment	Make	Model No.	Quantity
1	CAAQM Station along with Weather Monitoring Kit	Environnment – SA	Sonimix 3022 EN Series	03
2	CEMS	Dust Monitor : Sick Maihak Gas Analyzer: Chemtrol	OMD41, MCS100E HW	01
3	RDS (Respirable dust Sampler)	Envirotech Instruments Pvt. Ltd.	APM 460 & DX APM –460 BL	06
4	Fine Particulate Sampler (Combo PM10 & PM2.5 Sampler)	Eco Tech Instruments Pvt Ltd	Ecotech AAS 271	02
5	HVS (High Volume Sampler)	Envirotech Instruments Pvt. Ltd.	APM –415	01

S. No.	Name of Equipment	Make	Model No.	Quantity
6	Stack Monitoring Kit	Envirotech Instruments Pvt. Ltd.	APM –620	02
7	Stack Velocity Monitor	Envirotech Instruments Pvt. Ltd.	APM –602	01
8	Handy Sampler	Envirotech Instruments P Ltd	APM –821	01
9	Personal Sampler	Envirotech Instruments P Ltd	APM –800	02
10	Sound Level meter (SLM 100)	EPIL	30-DTI-2008	01
11	Flue Gas Analyzer	Kane international	KM – 9106	01
12	Diesel Smoke meter	Neptune Equipment Pvt. Ltd	Opax 2000 II/DX 200 P	01
13	Infrared Exhaust Gas Analyzer	Neptune Equipment Pvt. Ltd	TD 240/EGA 200	01
14	Weather Monitoring Instrument	Envirotech Instruments Pvt. Ltd.	WM271	01
15	On line Opacity Meter	Sick	OMD/41 – 02	07
16	Spectrophotometer	Spectronic Instruments	Spectronic 20 Genesys	01
17	Pressure manometer	Comark	C – 9553	01
18	Refrigerator 165 lit.	Godrej	Classic Del.	1
19	Hot Air Oven	Ambassador	BPI 9&10	1
20	BOD Incubator	Ambassador	BPI 34	1
21	COD Reflex Apparatus	Ambassador		1
22	Muffle Furnace	Ambassador		1
23	Water Bath	Ambassador	BPI 22	1
24	Balance 0.1mg	Precisa	Series XB	1
25	pH Meter	Systronics	335	1
26	TDS –Conductivity Meter	Systronics	308	1
27	Hot Plates	Ambassador		6
28	Separating Funnel	Borosil		2
29	CO Sampler (Ambient)	Pollution Protection System	GaZguard TX	1
30	Monitoring Van	Mahindra & Mahindra	Bolero LX	1

3. Monitoring of Air & Water Pollution: -

3.1 Ambient Air Monitoring: -

Air is the major shareholder of environment and gets affected immediately by each activity. So keeping in view of this, an air surveillance program has been designed to monitor the air quality around the mines in three fixed monitoring stations as per the RPCB guidelines.

The level of SPM, SO_2, NO_2 & CO monitored is always within the prescribed limits.
Please refer annexure # 1

3.2 Water Monitoring: -

There is no perennial source of surface water in the vicinity. Ground water is the major source and the entire requirement of water is met through ground water resource like open wells and tube wells.

3.3 Noise Monitoring: -

Noise is considered to be one of the dimensions of pollution, which leads to degradation of the environment and also poses health and communication hazards.
So keeping in view of this, monthly monitoring is being carried out at all the equipment's (inside & outside) in loaded as well as idle conditions on monthly basis. The noise levels are within the limits. In order to minimize / control the noise level and related hazards following steps have been taken.

i. Cowl covers have been provided on HEMM.
ii. Mufflers of asbestos rope have been provided at silencer in each of the HEMM.
iii. Engine calibrations are being done periodically.
iv. Sound proof cabins are provided for the operators.
v. Protective wears like earplug & ear muffler are also provided to the drillers and other workers who might be exposed to high noise areas.
Please refer annexure # 2

3.4 Dust Suppression: -

a) Water sprinkling – water is sprinkled continuously in the mine haul roads as well as near the faces in order to suppresses the fugitive emissions generated due to the movements of vehicles.

Sprinkling of water for the purpose of dust suppression on haul road is being carried out in a meaningful way with 1 nos. of water tankers (10 KL) but the availability of water is insufficient due to the poor rainfall in the area. Looking into the above the mine management has been adopted following steps additionally to minimize the dust hazard in mines.

- The top layer of the haul road is being spreaded with fine-grained "Pegmatite" which is heavier than the ordinary soil and hard to disperse with vehicle movement.
- Speed of vehicles has been restricted, which helps in less generation of dust during the movement.
- Spacing of vehicle is so maintained so as to avoid the dust getting airborne.

b) Water injecting system has been provided in the drill machines in order to control the dust generated during drilling operations. All the drillers are provided with DGMS approved dust masks.

c) Effective water sprinkling system has been provided in crusher hopper and screening hopper.

4. <u>Green Belt Development</u>: -
Plantation has carried out in the different areas of the mines in order to make it a greenbelt as well as control the fugitive emissions. In the financial year 2018-2019 the total number of 3000 saplings has been planted in the mines. The different species planted are Cassia Sama, Aquzsia, Neem, Pipal, Babool, Sisham, etc.

Year wise plantation is as below:

S. No.	Year of Plantation	Number of Plant Planted	Number of Plant Survived	Survival Rate (%)	Area Covered in Plantation (Hectare)
1	2013-2014	4908	4702	95.80	3.25
2	2014-2015	5100	4710	92.35	5.50
3.	2015-2016	6000	4100	68.33	4.35
4.	2016-2017	1200	1090	90.83	1.00
5.	2017-2018	2500	2410	96.40	1.60
6.	2018-2019	3000	2500	83.30	0.20
7.	2019-2020	3000	2700	90.00	0.30
	Total	**22708**	**19512**	**86.50**	**16.20**

5. Blast Vibration Studies: -

Vibration monitoring is carrying out on regularly basis. The peak particle velocity and air blast are well within the safe limits of prescribed standards as laid down in the Circular issued by the Directorate General of Mines Safety, Govt. of India.

Steps to control vibrations:

To control ground vibration, air blast & fly rock blasting is carried out by NONEL (non electric detonating) system, orientation of benches is modified and smaller round of blasts (15-20 numbers of deep holes) is being taken.

PART – H

Additional measures/investments proposal for environment protection including abatement of pollution, prevention of pollution.

For the coming year following proposal has been envisaged for pollution control: -

1. Large Scale Plantation: -

Plantation is being carried out in the different areas of the mines in order to make it a greenbelt as well as control the fugitive emissions.
The estimated cost of investment is Rs. 2.25 Lacs, for plantation & greenery development and approx. Rupees 4.72 Lacs after care for current year and previous year plantations.

2. Blast Vibration Studies: -

Regular Monitoring of ground vibrations has been carried out in order to measure the effects due to blasting operations in the surrounding areas.

3. Monitoring of water and soil in Core Zone: -

Monitoring of water and soil inside the core zone is being carried out.

4. Free medical check up:-

General medical services, health checkup & dressing of wound free of cost, medicine distribution at printed price rates, immunization, vaccination etc. is provided to villagers of nearby areas by operating mobile dispensaries. Making reference for serious disease for specialized medical option/ treatment Intensive programme are under taken for education of general health care to villagers through posters & workshops.

PART – I

Any other particulars for improving the quality of the environment

1. Rural Development and Socio – Economic Environment: -

The company has set up Ambuja Cement Foundation (ACF), a non-government organization registered with the government and its efforts are directed towards the upliftment of economically back ward population of the area as well as the conservation of environment. ACF in course of its activities collaborates with local government agencies like the district Rural Development Agency (DRDA), PHED, Gram Panchayat, Health Department and other social beneficiary bodies created by the government.

2. Welfare Amenities:-

V.T. Center: -Full fledged and well-equipped common V.T. Center is proposed in the Mines Office at Ras II Mines.

School: -The Company is running a Sr. Higher. Secondary School for the betterment and educational facility of employee's children at Rabriyawas site. The Company has appointed qualified teachers for running the school. The students enrolled in the Company's school are getting higher standard of education.

Games & Sports: -The Company has provided all the items necessary for the playing various games like volleyball, cricket, Basketball and Badminton etc.

Housing - The Company has provided good housing facility to the employees at Rabriyawas unit.

Medical facility:-There is an adequately equipped hospital at colony along with the arrangement of indoor wards (2-beds) and qualified medical staff at Rabriyawas Unit.

Arrangement has been made for the first aid to the injured persons if any at the work spot itself through the first aid personnel holding first aid qualification.
An ambulance van has been provided for speedy removal of ill and injured persons from mine to hospital. Employees residing in nearby villages are also provided ambulance van for attending Hospital for necessary medical investigations and treatment whenever possible.

3. <u>Water Harvesting:</u>

The Mines site falls in semi-arid zone with the average rainfall of 300 to 400 mm/yr. There are number of seasonal nallahs and streams which originate in between the valleys of the hills and traverse through the area. As a measurement of social commitment a number of bunds/anicuts have been constructed on the seasonal nallahs to check the flow of water which has resulted in increasing the water table considerably inspite repeated failure of monsoon. Moreover, the water is also used by the villagers for their daily need. Due to efforts on rainwater harvesting structures, water table of existing wells has increased. Because of ACFs training and awareness programmes, farmers are adopting less water requiring and high yielding horticulture crops to sustain agriculture practices.

As there is no perennial river, the entire demand is fulfilled by exploiting sub-surface water resource. Looking into the above, the following steps have been taken. **Please see Annexure # 3.**

For **Ambuja Cements Limited**
Unit: Rabriyawas

Arvind Singh
Sr. Manager (Environment)