Ambuja Cement

Ref. ACH/EMD/F-20/11/2021

26 Nov, 2021

Dr. Bhardwaj Adiraju,
MoEF&CC,
Regional Office (NCZ), 25
Subhash Road,
Dehradun – 248001.

Sub: Compliance Status for the period from April, 2021 to Sep, 2021 for:-

(i) **Point wise compliance of specific and general conditions of Environmental Clearance for 1.8 MTPA Cement Plant at village Rauri, Tehsil Arki, Darlaghat, Distt. Solan (H.P.) – J-11011/203/2005 IA-II(I).**

(ii) **Proposed 1.8 MTPA Cement Plant at Village Rauri, District Solan in Himachal Pradesh by M/s Ambuja Cements Limited- regarding Amendment in environmental clearance dated 27th January, 2006 due to drawl of ground water instead of surface water – J-11011/203/2005-IA II(I)**

Dear Sir,

Please find the enclosed point-wise compliance of Specific and General Conditions of above mentioned Environmental Clearances.

List of tables attached are as below:

1. Stack Monitoring results are given in table -1.
2. Monitoring results of SWRP for the stipulated parameters like pH, BOD and TSS at inlet and outlet is given in table - 2.
3. Results of Ambient Air Quality monitored in plant at fixed locations are given in table 3.
4. Noise level report inside plant is enclosed as table - 4.
5. Plantation data is enclosed as table – 5.

List of annexure attached are as below:

1. HPSPCB report of final outlet of SWRP is attached as annexure – 1.
2. Expenditure details for Environmental Protection activities annexure 2.
3. Consent compliance for Rauri Plant is enclosed as annexure 3.

This point wise compliance of specific and general conditions of **EC** is being forwarded along with relevant/ready **reference photographs & annexures** to your kind goodself in a systematic context, please.

Thanking you,

Yours Faithfully,
For **Ambuja Cements Ltd., (Unit Rauri)**

(Sandeep Bhimta)
Head,Environment

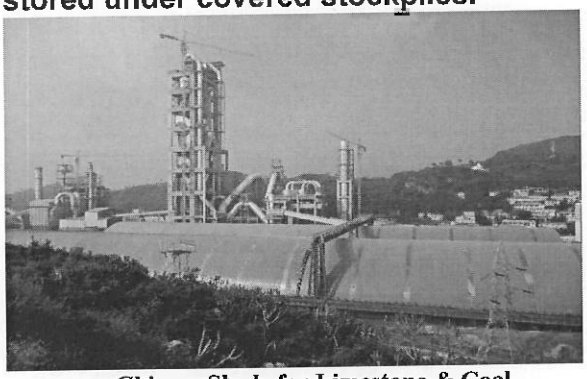
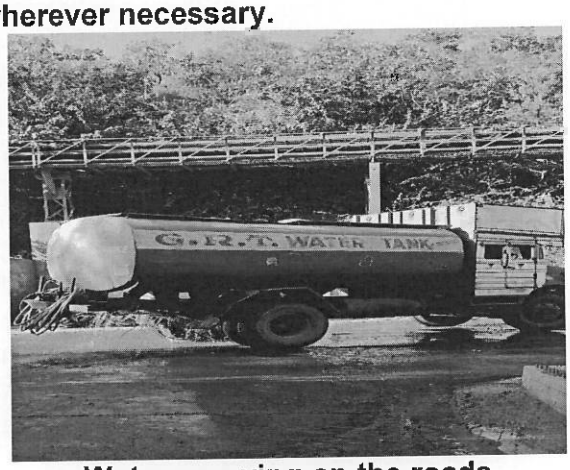
CC to:
Zonal Office (North) PICUP Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow - 226 010

Regional Officer, H P State Pollution Control Board, S.C.F. 6, 7 and 8, Sector – IV,PARWANOO, Distt. Solan (H.P.)

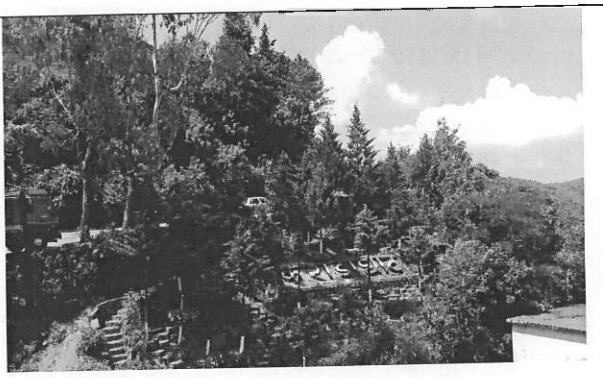
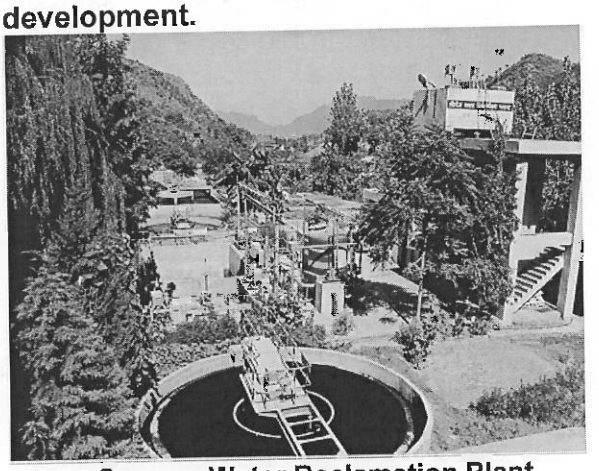
Encl.: (i) As above
(ii) Soft copy through e-mail

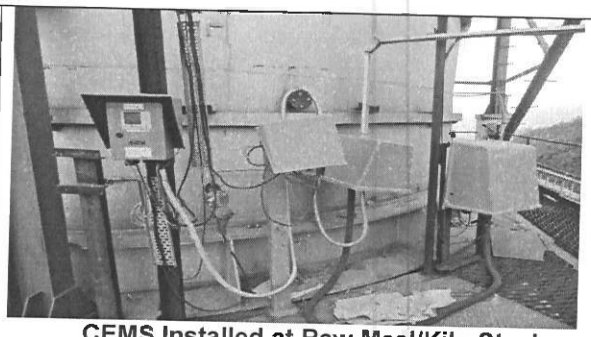
COMPLIANCE OF SPECIFIC & GENERAL CONDITIONS IMPOSED BY THE MoEF FOR PROPOSED CEMENT PLANT AT VILLAGE RAURI - 1.8 MTPA- J-11011/203/2005 IA-II(I).

Sr. No.	Conditions	Implementation
	A. Specific Conditions:	
i.	The gaseous and particulate matter emissions from various units should conform to the standards prescribed by the State Pollution Control Board. At no time, the particulate emissions from the cement plant and captive power plant (CPP) shall exceed 50 mg/Nm^3. Continuous on-line monitors for particulate emissions, SO_2 and NO_x in Raw/Kiln mill, clinker cooler, coal mill, cement mill etc. shall be provided and shall make necessary arrangements for submission of on-line real time emission data to CPCB website. Low NO_x burners shall be installed to control NO_x emissions. Interlocking facility shall be provided between pollution control equipment and the process operation so that in the event of the pollution control equipment not working, the respective unit (s) is shut down automatically.	**(a). The gaseous and Particulate Matter emissions from various units conform to the standards prescribed by the SPCB i.e. below 30mg/Nm3. Stack Monitoring report is enclosed as table 1.** **(b). We have installed the Continuous Particulate Matter (CPM) at our coal mill stack and cooler stack, Continuous Emission Monitoring System is installed at our main stack (stack attached to Raw Meal & Kiln). Low NOx burners have been installed to control the NOx emissions.** **(c). Interlocking facility has also been provided between pollution control equipment and the process operation so that in the event of the pollution control equipment not working, the respective unit (s) is shut down automatically.** **(d) In addition to this we also conduct third party stack monitoring by SGS India Ltd.**
ii.	Ambient air quality including ambient noise levels shall be monitored at different locations including fence of the sanctuaries and must not exceed the standards stipulated under EPA or by the State authorities. Monitoring of ambient air quality and stack emissions shall be carried out regularly in consultation with HPSEP & PCB and report submitted to the Board quarterly and to the Ministry's Regional Office at Chandigarh half-yearly. Continuous stack monitoring system shall be installed.	**(a).** We are monitoring the ambient air quality and ambient noise levels at our different locations and at the fence of the sanctuaries and the results are well within limits as compared to the standards laid down by the EPA. We have also installed one CAAQMS at Rauri Plant and the realtime data of the same is being reported to CPCB & HPSPCB website. Installation of two more CAAQMS for Rauri Plant is under progress. **(b).** There is a regular monitoring of ambient air quality; the results of the same are being submitted to SPCB. **(c).** Continuous stack emission monitoring systems have been installed at our stacks attached to Raw/Kiln mill, coal mill and clinker cooler stack.
iii.	Electrostatic precipitators (ESP) shall be installed in clinker cooler	**(a). Electrostatic precipitator has been installed in clinker cooler and bag house**

	to control air emissions. Bag house in raw mill and kiln, bag filters in cement mill and all the transfer points shall be provided. The dust collected from the pollution control equipments shall be recycled back into the process. Storage of raw materials viz. lime stone, coal, clinker shall be in closed roof sheds covered stockpiles. Water sprinkling arrangement should be made in the raw material stockyard and cement bag loading areas.	**in raw meal and kiln sections to control the emissions. All the transfer points have been provided with bag filters.** **(b). Dust collected from the APCE's is automatically recycled back into the process.** **(c). All the raw materials are being stored under closed roof sheds. Clinker is being stored under covered stockpiles.**  **Chinese Sheds for Limestone & Coal**
iv.	The company shall install adequate dust collection and extraction system to control fugitive dust emissions at various transfer points. Fugitive emissions from raw material storage yards, loading and unloading operation, material transfer points shall be controlled by providing bag filters and water sprinkling systems etc. Covered sheds shall be provided coal storage, iron containing material and red ochre. Unloading of the fly ash shall be carried out by providing pneumatic conveying system up to silo.	**Adequate dust collection and extraction system has been installed to control fugitive dust emissions. All the material transfer points have been provided with bag filters. Covered sheds has been provided to store the raw materials. As the unit is only clinkerisation unit & there is no usage of fly ash. Tennant Road sweeping Machines are also being used to clean the roads to control the fugitive dust emission. All the roads are pucca however sprinkling is also being carried out wherever necessary.**  **Water spraying on the roads**
v.	Total water requirement shall not exceed the limit stipulated by the	**(a). Necessary permissions for the drawl of ground water has been obtained.**

	Central/State Ground Water Board and prior permission shall be obtained for drawl of ground water. No effluent shall be discharged from the process outside the premises and all the treated wastewater from Sewage Water Reclamation Plant (SWRP) shall be utilized for green belt development and other plant related activities. SWRP shall be further augmented as per the requirement of the expansion project.	**(b). Being a dry process no effluent is generated from the process.** **(c). However the domestic waste water generated from residential facilities as well as from the offices is being treated at SWRP. Treated water thus generated is reused for greenery development, dust suppression, cooling makeup etc. and the biological sludge generated is used for greenery development.** **(d) Treated water analysis report is enclosed as table 2.** **(e) HPPCB analysis report of final outlet of SWRP is attached as annexure 1.**
vi.	Due to enhanced movement of the trucks due to expansion of the project and other cement industries in the same region, the industry may consider feasibility of setting up of the conveyer belt transportation system for the raw material as well as final product to decongest the traffic in the hill region in collaboration with the Central Road Research Institute, New Delhi.	a) We have successfully commissioned 3 nos. of Over Land Belt Conveyors (OLBC) with 3 nos. tunnels , criss- crossing mountains covering 6.3 Kms from Mangu crusher to Rauri plant for the transportation of Raw Material i.e. Limestone. b) Central Road Research Institute has carried out study on Road Network connecting Darlaghat - Ropar and Darlaghat – Nalagarh in 2012.
vii.	The company must harvest surface as well as rainwater from the rooftops of the buildings proposed in the expansion project and storm water drains to recharge the ground water and use the same water for the various activities of the project to conserve fresh water.	Six rainwater recharging pits have been constructed in the plant premises to recharge the ground water.
viii.	Green belt shall be developed in and around the expansion project in at least 25 % of the area as per the CPCB guidelines in consultation with the local DFO. Plantation shall also be done along the roadside between Ropar and Darlaghat in collaboration with the State Forest Department due to regular plying of trucks carrying fly ash	**a) A report on green belt has been submitted vide letter ACL/EMD/F-13/03(6)/2016.** **(b). We have paid amount 69,48,000/- to State Forest Deptt for the plantation works along NH- 205.** **(c) A report on Green Belt assessment carried out by HFRI Shimla is already submitted by our office letter no ACH/EMD/F-20/11/2017 dated 30th Nov. 2017.**

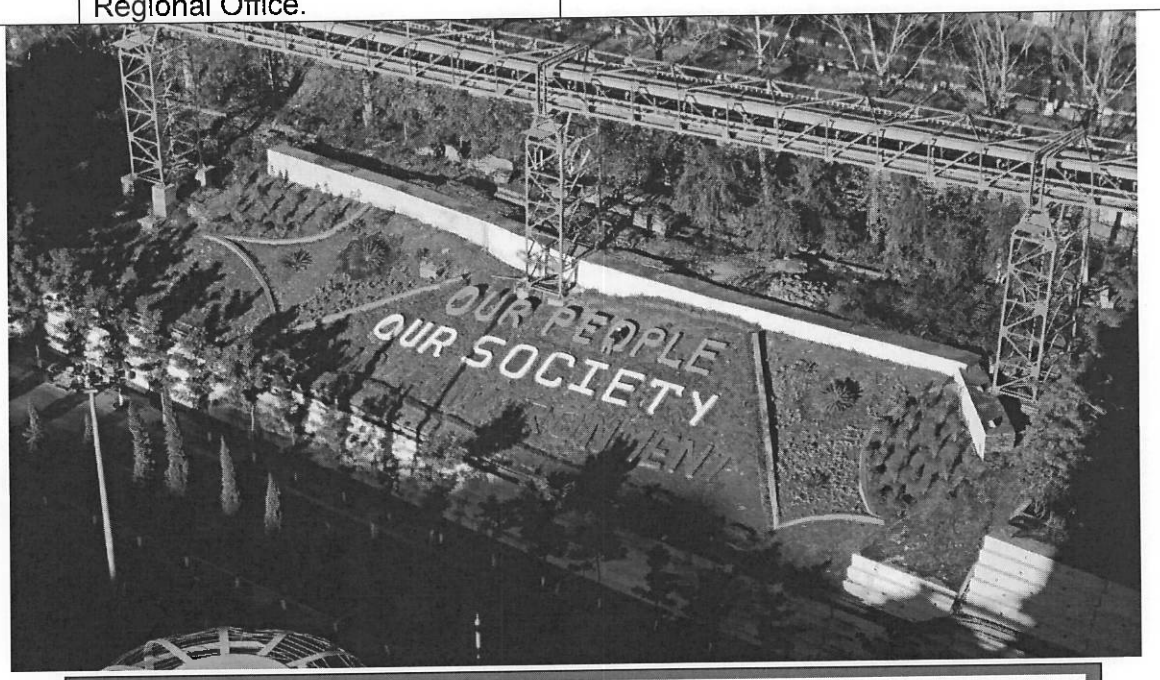
	and cement.	 **Eco- Green Park along NH - 205 Kararaghat**
ix.	Solid waste generated shall be 100 % recycled and reutilized in the process itself. Treated STP sludge shall be used for green belt development.	**(a). Solid waste generated is being recycled and reutilized in the process by 100 %.** **(b). Treated Biological Sludge generated from STP is being used for green belt development.**  **Sewage Water Reclamation Plant**
x.	The company shall undertake eco-development measures including community welfare measures in the project area.	Ambuja Cement Foundation, (N.G.O.) has already been formed to look after the community welfare activities like plantation, rain water harvesting systems, agricultural improvement, health camps, infrastructural development etc. Expenditure on Community development is given in Annexure 2.
xi.	The company shall follow all the recommendations mentioned in the Charter on Corporate Responsibility for Environmental Protection (CREP) especially all the major stacks shall be provided with continuous emission monitoring for particulate matter.	All the major stacks i.e. Raw Mill/Kiln stack, Coal Mill stack and Clinker Cooler stack have been provided with Continuous Particulate monitor systems. We are sending our online realtime emission data of CEMS to CPCB & HPSPCB.

		 CEMS Installed at Raw Meal/Kiln Stack
xii.	Rehabilitation and resettlement plan prepared and submitted for the land acquired for the expansion project shall be implemented as per the R & R policy of the State Govt. in a time bound manner and report submitted to the Ministry.	Rehabilitation and resettlement is being carried out as per State Govt. R & R Policy.
xiii.	No work at site shall be undertaken without obtaining prior permission from the Chief Wildlife Warden, Govt. of H.P.	Necessary permission has been obtained from Chief Wildlife Warden, Govt. of H.P.
	B. General Conditions:	
i.	The project authority must adhere to the stipulations made by H.P. State Environment Protection & Pollution Control Board (HPSEP & PCB) and State Government.	Company is adhering to comply with the stipulations made by H.P. State Environment Protection & Pollution Control Board (HPSEP & PCB) and State Government.
ii.	No further expansion or modification of the plant should be carried out without prior approval of this Ministry.	Noted & shall be adhered.
iii.	At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of SPM, SO_2 and NO_x are anticipated in consultation with the HPSEP & PCB. Data on ambient air quality and stack emissions should be regularly submitted to this Ministry including its regional office at Chandigarh and HPSEP & PCB once in six months.	We are already monitoring the ambient air quality at four locations including one CAAQMS and regularly submitting the reports to SPCB and to MoEF. The realtime data of the CAAQMS is being reported to CPCB & HPSPCB website. Ambient Air Quality Monitoring report is enclosed as **table 3.**
iv.	Industrial wastewater should be properly collected, treated so as	Being a dry process, no industrial waste water is being generated from the process.

	to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December 1993 or as amended from time to time. The treated wastewater should be utilized for plantation purpose.	However the waste water generated from offices and residential facilities is being treated and utilized for plantation and other purposes.
v.	The overall noise level in and around the plant area should be kept 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 should conform to the standards prescribed under Environmental (Protection) Act, 1986 Rules 1989 viz. 75 dbA (day time) and 70 dbA (night time)	Noise control measures have been provided at all sources of noise generation. The results are well within limit as prescribed under Environmental (Protection) Act, 1986 Rules 1989.Several measures have been taken for noise reduction in Raw Material Hopper building and are as under – **a)** Entire Building has been covered with GI sheets. **b)** All working entrance provided with mechanized automatic doors. c) Insulation on raw material hoppers has been provided. **d)** Raw material hopper inlet point with double metallic jacket filled with concrete. **e)** Two Acoustic enclosures have been provided in Raw Material Hopper area. **f)** Acoustic working for raw mill building has been completed to reduce the noise level.
vi.	Proper housekeeping and adequate occupational health programmes must be taken up. All the persons working in the sensitive areas shall wear protective covers. Occupational health surveillance programmes shall be done on a regular basis and records maintained. The programme must include lung function and sputum analysis tests once in six months.	Ambuja Cement Ltd. company is very much conscious about the occupational health and safety of employees and workers. Different types of health and house keeping programmes are regularly being organized by the company and the records are maintained. All the workers and employees are trained about the use of Personal Protective Equipments. Being a conscious company about the safety of employees the company has its own five cardinal rules for safety which each and everyone has to followed.
vii.	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP	These are being complied.
viii	A separate Environmental management cell with full-fledged laboratory facilities to carry out various management and monitoring functions should be	**(a).** A separate Environmental Management Division has already been set up to look after environment related activities. **(b).** EMS awareness program & other regular eco-green activities are being carried out as

	set up under the control of Senior Executive.	per our scheduled targets.  Vanmahotasava clebration with HPSPCB and Forest Deptt.
ix	The project authorities will provide adequate funds both recurring and non recurring to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purposes.	Adequate funds have been taken for wild life conservation, emission monitoring (water / air / noise / soil etc.), sewage water treatment plant operation, water harvesting, noise reduction measures, plantation, mines site restoration etc. The funds earmarked for environmental protection measures are taken as a separate budget and six monthly expenditure is reported to the regional office of MoEF.
x	The Regional Office of this Ministry at Chandigarh / Central Pollution Control Board / HPSEP & PCB will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with the statistical interpretation should be submitted to them regularly.	Six monthly compliance reports for the conditions stipulated in environmental clearance granted by MoEF are being submitted to The Regional Office of CPCB & HPSPCB.
xi	The project authorities should inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	Land development work for the project has been started from June 2007 and the same has been conveyed to the Regional Office of ministry.
xii	The project proponent should inform the public that the project has been accorded	Advertisement has been made in two local news papers and a copy has been submitted to the Regional Office of MoEF, Chandigarh.

	environmental clearance by the Ministry and the copies of the clearance letter are available with the HPSEP & PCB/Committee and may also be seen at 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 at least in two local newspapers that are widely circulated in the region of which one shall be in vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional Office.	



Protect our environment, keep it safe; tomorrow, we'll be saved!
EMD- Team, ACL Darlaghat

Compliance of conditions imposed by MoEF regarding Amendment in EC for Rauri Plant at Village Rauri, Distt. Solan, Himachal Pradesh [(F.No. J-11011/203/2005-IA II (I)]

S. No.	Conditions	Implementation
(i)	No contaminated water shall be diverted in to the storm water drains. The peripheral drains shall be constructed to divert the runoff to the recharge structures. Before the onset of monsoon, the catchment area considered for recharge shall be cleaned. The recharge structures shall be in operation during monsoon season.	Being complied.
(ii)	The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 8226 (E) dated 16th November, 2009 shall be followed.	Being Complied.
(iii)	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental 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 Chandigarh / CPCB/SPCB shall monitor the stipulated conditions.	We are submitting the six monthly compliance reports on regular basis along with the results of monitored data (both in hard and soft copies).
(iv)	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 Environment (Protection) Rules, 1986 as amended subsequently, shall also be put on the website of the company alongwith the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MoEF by e-mail.	Environmental statement is being submitted to HPSPCB every year. Monthly reports and six monthly compliance reports are uploaded on our website on regular basis.
(v)	A copy of clearance letter shall be sent by proponent to concerned Panchayat, Zila Parishad/Municipal	Complied.

Compliance of conditions imposed by MoEF regarding Amendment in EC for Rauri Plant at Village Rauri, Distt. Solan, Himachal Pradesh [(F.No. J-11011/203/2005-IA II (I)]

	Corporation, Urban Local Body and the Local NGO, if any, from whom clearance letter shall also put up on the website of the Company by the proponent.	
(vi)	The Company shall submit within three months their policy towards Corporate Environment Responsibility which should inter-alia address (i) Standard operating process/procedure to being into focus any infringement / deviation / violation of environmental or forest norms/ conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non compliance /violation environmental norms to the Board of Directors of the company and /or stakeholders or shareholders.	Corporate Environment Policy has been submitted.

Table - 1

Monthly Average of Stack Monitoring Results

(Average Value)

(From April 2021 to Sep 2021)

MONTHS	Monthly PM Value in mg/Nm3			
	Glass Bag House	Cooler ESP	Coal Mill B/F	Limestone Crusher B/F
Apr-21	4.49	18.81	2.43	10.61
May-21	4.57	21.03	2.22	18.52
Jun-21	9.11	19.68	7.95	17.02
Jul-21	6.31	16.90	6.07	15.70
Aug-21	7.20	17.44	12.86	14.17
Sep-21	4.29	20.54	15.64	15.18

Table - 2

Inlet and Outlet Sewage Water Characteristics (Monthly Average)
(From April 2021 to September 2021)

MONTHS	INLET			OUTLET		
	pH	BOD	TSS	pH	BOD	TSS
Apr-21	8.10	254.40	356.90	7.60	10.80	12.70
May-21	8.10	254.00	362.60	7.50	10.40	12.80
Jun-21	8.00	254.00	356.30	7.40	12.00	10.70
Jul-21	8.10	253.00	359.30	7.40	10.00	12.50
Aug-21	8.10	253.30	357.70	7.40	12.70	12.70
Sep-21	8.10	256.70	358.00	7.40	10.70	11.20

Except pH, all parameters are in mg/lit.

Table- 3

Monthly Average of Ambient Air Quality Monitoring Results Rauri Plant
(PM 10, PM 2.5,SO2 & NO2)
(From April 2021 to Sep 2021)

MONTH	Rauri - 1				Rauri - 2				Rauri - 3			
	PM 2.5 (µg/m3)	PM 10 (µg/m3)	SO2 (µg/m3)	NO2 (µg/m3)	PM 2.5 (µg/m3)	PM 10 (µg/m3)	SO2 (µg/m3)	NO2 (µg/m3)	PM 2.5 (µg/m3)	PM 10 (µg/m3)	SO2 (µg/m3)	NO2 (µg/m3)
Apr-21	24.79	57.63	4.88	12.25	27.08	59.54	5.00	11.13	29.32	62.58	5.32	12.50
May-21	29.38	61.16	4.50	11.38	36.20	64.35	4.88	13.38	33.28	67.08	5.00	12.50
Jun-21	24.01	52.77	4.88	11.40	22.24	55.54	5.00	10.50	20.83	56.59	6.25	11.40
Jul-21	13.02	42.43	3.71	6.30	11.25	40.21	3.43	5.30	10.63	38.37	4.25	6.10
Aug-21	12.14	31.19	4.75	9.50	15.21	34.38	4.25	11.60	17.14	36.67	4.88	10.50
Sep-21	17.50	46.92	4.13	9.00	19.90	51.03	4.25	9.30	21.61	49.00	4.38	9.50

Monthly Average of Ambient Air Quality Monitoring Results Rauri Plant
(Lead, Nickel, Arsenic & CO)
(From April 2021 to Sep 2021)

MONTH	Rauri - 1				Rauri - 2				Rauri - 3			
	Lead (µg/m3)	Nickel (ng/m3)	Arsenic (ng/m3)	CO (mg/m3)	Lead (µg/m3)	Nickel (ng/m3)	Arsenic (ng/m3)	CO (mg/m3)	Lead (µg/m3)	Nickel (ng/m3)	Arsenic (ng/m3)	CO (mg/m3)
Apr-21	ND	ND	ND	0.560	ND	ND	ND	0.570	ND	ND	ND	0.510
May-21	ND	ND	ND	0.530	ND	ND	ND	0.480	ND	ND	ND	0.500
Jun-21	ND	ND	ND	0.530	ND	ND	ND	0.540	ND	ND	ND	0.520
Jul-21	ND	ND	ND	0.420	ND	ND	ND	0.440	ND	ND	ND	0.390
Aug-21	ND	ND	ND	0.410	ND	ND	ND	0.390	ND	ND	ND	0.360
Sep-21	ND	ND	ND	0.390	ND	ND	ND	0.410	ND	ND	ND	0.400

Table-4

MONTHLY NOISE MONITORING RESULTS (INSIDE PLANT)
AT AMBUJA CEMENTS LTD. (UNIT - RAURI)
(From April 2021 TO Sep 2021)

MONITORING LOCATIION	Apr-21		May-21		Jun-21		Jul-21		Aug-21		Sep-21	
	DAY	NIGHT	DAY	NIGHT	DAY	NIGHT	DAY	NIGHT	DAY	NIGHT	DAY	NIGHT
(i) With Vehicular Movement	77.3	75.1	67.4	65.7	77.4	75.1	77.1	75.5	78.3	74.7	73.5	72.1
(ii) Without Vehicular Movement	68.5	64.7	60.6	58.2	68.7	67.3	68.4	66.9	69.7	66.9	68.7	66.4
Coal Dump Hopper	62.6	61.9	70.2	68.7	60.3	59.9	60.8	59.3	63.1	62.4	65.4	62.4
Near Raw Maerial Hopper	81.8	80.7	69.6	68.4	76	75.8	76.4	75.7	76.5	72.7	87.9	82
GBH (Bear YSS 15)	72.1	71.5	73.3	71.6	81.6	80.9	82.9	81.5	72.2	71.5	73.7	72.3
Raw Mill	84.6	84.2	84.6	83.9	84.2	83.4	84.7	83.1	83.9	83	83.5	83
Infront of CCR	73.1	71.4	60.4	58.2	78.1	76.5	68.9	67.4	70.1	69.4	71.9	70.7
Compressor House - 1 Inside	80.7	80.1	87.8	86.5	84.2	83.1	85.6	83.2	80.9	80.1	83.6	82.5
Compressor House - 1 Outside	81.3	79.8	83.7	82.9	83.4	82.2	83.8	83.1	82.3	81.6	81.3	80.1
Compressor House - 2 Inside	87.6	86.3	86.2	85.7	85.9	84.8	89.8	89.2	86.4	85.3	86.9	86.3
Compressor House - 2 Outside	84	83.1	82.1	81.3	83.2	82.9	82.2	81.7	84	83.7	84.5	83.7
Compressor House - 3 Inside	88.3	87.5	87.6	87.1	87.1	86.7	86.9	85.6	83.3	81.5	87	86.2
Compressor House - 3 Outside	82.9	81.3	83.5	82.7	84.3	83.6	84.4	83.8	80.4	79.8	81.8	80.9
Near Coal Mill	84.2	83.8	84.2	83.5	83.1	82.4	82.3	81.6	84.2	34.9	84.3	83.2
(i) With Vehicular Movement	75.2	72.4	76.1	75.3	78.5	76.8	77.5	73.2	75.3	72.7	74.2	72.1
(ii) Without Vehicular Movement	56.6	56.1	62.7	60.5	68.2	67.3	68.7	67.9	58.5	58.4	54.5	51.8

Table - 5

TOTAL NOS. OF PLANTS PLANTED

(FROM Apr. 2021TO Sep. 2021)

Area of Plantation	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Total
Inside Plant Area	0	0	0	0	0	0	0
Around Plant Area	0	0	0	0	0	0	0
Within Colony Area	0	0	0	0	0	0	0
Inside Mines Area	0	0	170	865	582	557	2174
Total	**0**	**0**	**170**	**865**	**582**	**557**	**2174**

Total plantation inclusive cuttings,Saplings,Shrubs and replacement etc.

Environmental Expenditure – RAURI and Kashlog Limestone Mines (Apr. 2021 – Sep. 2021)

Sr. No.	Environmental Expenditure Area	Capital/Recurring	Amount
1	Air pollution control equipments maintenance(Bag Filters etc.), STP maintenance, Analyzers and other monitoring equipments maintenance.	Recurring	2201454/-
2	Monitoring and analysis of environmental parameters, studies, purchase of small new equipments, plantation, fees, salaries, cess & Site cleaning etc.	Recurring	17295431/-
3	Air pollution control equipments running expenses	Recurring	47519649/-
4	Mines – construction of check dams/ check filters, Toe walls etc, Water spraying on haul roads, use of IKON, plantation, soil conservation works, water harvesting etc.	Recurring Capital	1369121/-
5	Depreciation on Environmental assets	Capital	808749.11/-
6	Community development works	Recurring Capital	20564583/-
7	Roads	Capital	925760.28/-
8	Any Other Important Environmental Investment	Capital (AFR Feeding System)	56596167.42/-

Total Capital Cost: - 58330676.81 /- Rs

Total Recurring Cost:- 88950238 /- Rs

Total Cost Recurring + Capital Cost :- 147,280,915 /- Rs

(Rs. Fourteen Crore Seventy Two Lakh Eighty Thousand Nine Hudred Fifteen)

Himachal State Pollution Control Board
Central Laboratory
(NABL, QCI Govt of India Accredited/Approved Laboratory)
SCF 6,8 Sector -4 Parwanoo. Distt Solan-173220

Tele.no :01792-232540

NABL Accreditation Certificate No: TC-8060 / ISO/IEC 17025:2005
Validity : 03.11.2020 To 02.11.2021

TEST REPORT

TEST REPORT NO : CL/WW/NABL/1177 DATE : 1 /06/2021

1. Name Of the Unit : M/S Ambuja Cement Ltd,
2. Address : Darlaghat , Distt Solan (HP)
3. Nature Of Sample : Grab
4. Sample Collected by : A.E.E. HPPCB Parwanoo
5. Quantity of Sample Received : 2 Lt
6. Date & Time of Collection : 10.03.2021
7. Date of Start & Completion of Analysis : 12.03.2021 to 26.03.2021
8. Sampling Point : Final Outlet of STP

Sr	Parameter	Unit	Test Method	Result
1.	pH*	-	APHA 4500-H Electometeric method	8.19
2.	Total Suspended Solid *	mg/L	APHA 2540 C TSS Dried at 103-105 c	1.8
3.	Chemical Oxygen Demand *	mg/L	APHA 5220 B. Open reflux method	16.0
4.	Biochemical Oxygen Demand *	mg/L	IS: 3025 (Part 44): 1993 by BIS	1.2
5.	Oil & Grease	mg/l	APHA5520 D.Soxhlet Extraction Method	Nil

Laboratory Remarks: Above all the parameters are with in the prescribed Standard limits

Satvinder Kaur
Junior Scientific Officer
Deputy Technical Cum Quality Manager

27 - 2860

Dr T.B.Singh
Principal Scientific Officer
Technical Cum Quality Manager

Note: 1 **These parameters are covered under the scope of NABL.*
2.The results refer only to the tested samples and applicable parameters .Endorsement of Products is neither inferred nor implied.
3. Sample will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
4. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Boar.
5. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
6. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Himachal Pradesh Jurisdiction only.