

Ambuja Cement

Ref. ACH/EMD/F-20/05/2020

28 May, 2020

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

Sub: Compliance Status for the period from October, 2019 to March, 2020 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 details 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

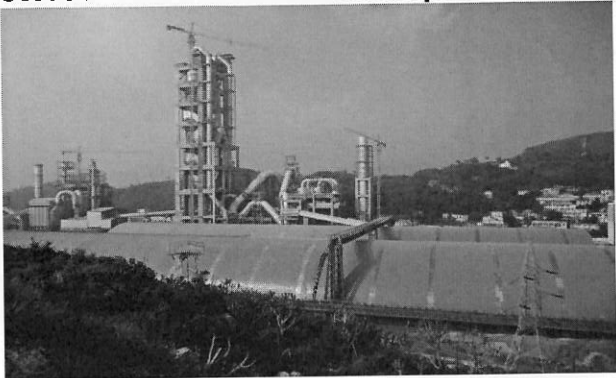
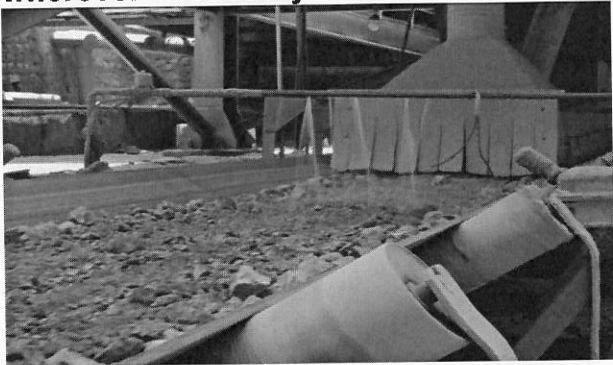
AMBUJA CEMENTS LIMITED
(UNIT RAURI)

P. O. Darlaghat - 171 102, Tehsil Arki, Distt. Solan (H.P.)
Phone : 01796-306190, 306468 Fax : 248335, 248316, Website : www.ambujacement.com
(Regd. Off. : P. O. Ambuja Nagar, Taluka - Kodinar, Distt. - Junagarh, Gujarat - 362715)

**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.	<p>(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.</p> <p>(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 NO_x burners have been installed to control the NO_x emissions.</p> <p>(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.</p> <p>(d) In addition to this we also conduct third party stack monitoring by SGS India Ltd.</p>
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.	<p>(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.</p> <p>(b). There is a regular monitoring of ambient air quality; the results of the same are being submitted to SPCB.</p> <p>(c). Continuous stack emission monitoring systems have been installed at our stacks attached to Raw/Kiln mill, coal mill and clinker cooler stack.</p>
iii.	Electrostatic precipitators (ESP) shall be installed in clinker cooler	(a). Electrostatic precipitator has been installed in clinker cooler and bag house



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	<p>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.</p>	<p>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.</p>  <p align="center">Chinese Sheds for Limestone & Coal</p>
iv.	<p>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.</p>	<p>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.</p>  <p align="center">Water sprinkling system installed</p>
v.	<p>Total water requirement shall not exceed the limit stipulated by the Central/State Ground Water Board and prior permission shall</p>	<p>(a). Necessary permissions for the drawl of ground water has been obtained. (b). Being a dry process no effluent is generated from the process.</p>

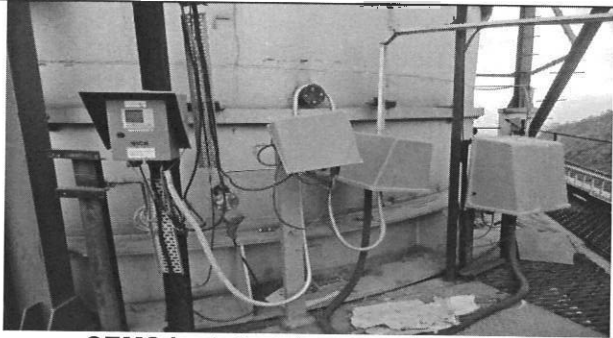
**COMPLIANCE OF SPECIFIC & GENERAL CONDITIONS IMPOSED BY THE MoEF FOR PROPOSED
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	be obtained for drawl of ground water. No effluent shall be discharged from the process outside the premises and all the treated wastewater from Sewage Water Reclamation 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.	<p>(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.</p> <p>(d) Treated water analysis report is enclosed as table 2.</p> <p>(e) HPPCB analysis report of final outlet of SWRP is attached as annexure 1.</p>
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.	<p>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.</p> <p>b) Central Road Research Institute has carried out study on Road Network connecting Darlaghat - Ropar and Darlaghat – Nalagarh in 2012.</p>
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 and cement.	<p>a) A report on green belt has been submitted vide letter ACL/EMD/F-13/03(6)/2016.</p> <p>(b). We have paid amount 69,48,000/- to State Forest Deptt for the plantation works along NH- 205.</p> <p>(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.</p>

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		 <p align="center">Eco- Green Park along NH - 205 Kararaghat</p>
ix.	<p>Solid waste generated shall be 100 % recycled and reutilized in the process itself. Treated STP sludge shall be used for green belt development.</p>	<p>(a). Solid waste generated is being recycled and reutilized in the process by 100 %.</p> <p>(b). Treated Biological Sludge generated from STP is being used for green belt development.</p>  <p align="center">Sewage Water Reclamation Plant</p>
x.	<p>The company shall undertake eco-development measures including community welfare measures in the project area.</p>	<p>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.</p>
xi.	<p>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.</p>	<p>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.</p>


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		 <p align="center">CEMS Installed at Raw Meal/Kiln Stack</p>
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.

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	to conform to the standards prescribed under GSR 422 (E) dated 19 th May, 1993 and 31 st 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

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	set up under the control of Senior Executive.	per our scheduled targets. 
		Van Mahotsava celebration
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 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	Advertisement has been made in two local news papers and a copy has been submitted to the Regional Office of MoEF, Chandigarh.

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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 16 th 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 31 st 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 Oct 2019 to March 2020)

MONTHS	Monthly PM Value in mg/Nm ³			
	Glass Bag House	Cooler ESP	Coal Mill B/F	Limestone Crusher B/F
Oct-19	5.71	13.57	10.88	11.62
Nov-19	6.78	17.57	8.25	12.23
Dec-19	5.94	14.18	9.90	11.97
Jan-20	5.44	11.35	10.48	13.82
Feb-20	8.33	13.66	4.64	12.94
Mar-20	6.72	15.36	4.41	14.42

Table - 2

Inlet and Outlet Sewage Water Characteristics (Monthly Average)
(From October 2019 to March 2020)

MONTHS	INLET			OUTLET		
	pH	BOD	TSS	pH	BOD	TSS
Oct-19	8.09	257.30	360.00	7.50	11.30	12.20
Nov-19	8.08	258.00	354.67	7.40	11.30	12.80
Dec-19	8.10	252.70	357.70	7.50	12.70	12.70
Jan-20	8.10	253.50	256.00	7.50	11.50	11.60
Feb-20	8.10	251.00	358.00	7.50	10.50	12.30
Mar-20	8.10	253.50	361.00	7.50	10.00	12.30

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 Oct. 2019 to Mar. 2020)

MONTH	Rauri - 1				Rauri - 2				Rauri - 3			
	PM 2.5 (µg/m ³)	PM 10(µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM 2.5 (µg/m ³)	PM 10(µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM 2.5 (µg/m ³)	PM 10(µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)
Oct-19	14.06	61.41	4.75	12.63	17.08	65.44	5.88	13.38	16.00	57.74	5.00	14.13
Nov-19	19.64	60.53	3.63	9.50	23.23	58.50	4.63	11.88	21.87	56.46	4.25	11.50
Dec-19	17.86	63.64	4.88	14.50	23.02	61.50	7.00	12.13	19.32	66.02	6.00	13.88
Jan-20	23.91	61.89	3.75	11.25	21.77	58.16	4.13	13.75	19.64	56.60	4.00	12.13
Feb-20	17.97	60.25	4.63	10.38	22.14	61.71	4.75	11.50	24.32	63.72	4.88	14.25
Mar-20	18.06	58.25	4.17	12.00	21.67	52.18	4.50	13.67	16.94	55.08	4.83	13.83

Monthly Average of Ambient Air Quality Monitoring Results Rauri Plant
(Lead, Nickel, Arsenic & CO)
(From Oct. 2019 to Mar. 2020)

MONTH	Rauri - 1				Rauri - 2				Rauri - 3			
	Lead (µg/m ³)	Nickel (ng/m ³)	Arsenic (ng/m ³)	CO (mg/m ³)	Lead (µg/m ³)	Nickel (ng/m ³)	Arsenic (ng/m ³)	CO (mg/m ³)	Lead (µg/m ³)	Nickel (ng/m ³)	Arsenic (ng/m ³)	CO (mg/m ³)
Oct-19	ND	ND	ND	0.570	ND	ND	ND	0.550	ND	ND	ND	0.530
Nov-19	ND	ND	ND	0.610	ND	ND	ND	0.570	ND	ND	ND	0.580
Dec-19	ND	ND	ND	0.530	ND	ND	ND	0.560	ND	ND	ND	0.530
Jan-20	ND	ND	ND	0.500	ND	ND	ND	0.540	ND	ND	ND	0.520
Feb-20	ND	ND	ND	0.580	ND	ND	ND	0.550	ND	ND	ND	0.520
Mar-20	ND	ND	ND	0.550	ND	ND	ND	0.520	ND	ND	ND	0.500

Table-4

**MONTHLY NOISE MONITORING RESULTS (INSIDE PLANT)
AT AMBUJA CEMENTS LTD. (UNIT - RAURI)
(From Oct 2019 TO Mar 2020)**

MONITORING LOCATION	Oct-19		Nov-19		Dec-19		Jan-20		Feb-20		Mar-20	
	DAY	NIGHT	DAY	NIGHT	DAY	NIGHT	DAY	NIGHT	DAY	NIGHT	DAY	NIGHT
(i) With Vehicular Movement	75.9	73.5	71.4	70.7	74.5	72.9	72.4	70.7	74.9	72.3	79.3	77.8
(ii) Without Vehicular Movement	59.3	57.1	53.9	56.1	59.2	56.7	56.7	53.2	69.4	67.8	65.1	61.4
Coal Dump Hopper	69.8	66.9	68.5	65.3	67.6	66.1	55.3	53.6	63.6	61.9	78.2	76.7
Near Raw Maerial Hopper	70.6	68.5	69.7	67.2	72.1	70.5	76.6	74.0	81.7	80.2	75.7	70.2
GBH (Bear YSS 15)	72.5	69.1	82.1	80.5	75.3	73.2	81.3	80.9	72.5	71.7	83.9	81.4
Raw Mill	84.2	83.8	83.8	83.0	84.9	83.8	85.0	84.3	84.3	84.1	84.8	83.3
Infront of CCR	82.5	81.2	80.4	78.2	78.4	76.3	83.4	81.8	70.1	69.9	76.5	75.9
Compressor House - 1 Inside	86.3	84.9	73.6	71.5	83.6	81.7	84.0	82.4	87.4	84.7	86.3	85.1
Compressor House - 1 Outside	78.7	77.2	84.8	81.9	79.2	77.9	83.1	82.7	83.9	82.3	85.1	84.7
Compressor House - 2 Inside	86.9	86.4	72.9	70.1	87.5	85.3	87.0	86.5	87.3	86.5	86.4	85.2
Compressor House - 2 Outside	82.5	81.7	81.6	80.8	84.1	83.7	82.1	80.2	84.1	83.8	83.7	82.5
Compressor House - 3 Inside	87.3	86.5	78.3	75.1	89.3	88.1	88.9	87.1	86.8	85.4	87.4	86.0
Compressor House - 3 Outside	83.9	83.1	82.6	81.9	87.9	86.4	84.4	83.9	84.6	83.1	82.8	81.7
Near Coal Mill	84.1	83.8	83.4	79.1	86.5	85.6	85.0	84.4	84.8	84.3	84.4	83.5
(i) With Vehicular Movement	79.6	75.4	73.6	71.9	80.2	78.7	76.8	73.1	74.5	72.3	75.2	71.9
(ii) Without Vehicular Movement	58.9	56.2	52.4	50.7	66.7	65.4	52.5	50.7	59.1	56.6	62.5	61.3

Table -5

TOTAL NOS. OF PLANTS PLANTED
(FROM October 2019 TO March 2020)

Area of Plantation	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	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	170	155	175	260	210	190	1160
Total	170	155	175	260	210	190	1160

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

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 : 03.11.2018 To 02.11.2020

TEST REPORT

TEST REPORT NO : CL/WW/NABL/232

DATE : 01/11/2019

- | | |
|---|--------------------------------------|
| 1. Name Of the Unit | : M/S Ambuja Cement Ltd (Suli Plant) |
| 2. Address | : Distt Solan HP |
| 3. Nature Of Sample | : Grab |
| 4. Sample Collected by | : S.E.E. HPPCB Parwanoo |
| 5. Quantity of Sample Received | : 2 Lt |
| 6. Date & Time of Collection & In warding | : 18.10.19 |
| 7. Date of Start & Completion of Analysis | : 19.10.19 to 01.11.2019 |
| 8. Sampling Point | : Final Outlet of STP |

Sr	Parameter	Unit	Test Method	Result
1.	pH*	-	APHA 4500-H Electrometric method	7.46
2	Total Phosphate	mg/l	APHA23 rd Edition	0.18
3.	Total Suspended Solid *	mg/l	APHA 2540 C TSS Dried at 103-105 c	32.0
4.	Phenol	mg/l	APHA23 rd Edition	-
5.	Chemical Oxygen Demand *	mg/l	APHA 5220 B. Open reflux method	-
6.	Biochemical Oxygen Demand *	mg/l	IS: 3025 (Part 44): 1993 by BIS	4.2
7.	Oil & Grease	mg/l	APHA5520 D.Soxhlet Extraction Method	NH
8.	Chloride	mg/l	APHA23 rd Edition	-
9.	Fe	mg/l	APHA23 rd Edition	-
10.	Pb	mg/l	APHA23 rd Edition	-
11.	Ni	mg/l	APHA23 rd Edition	-
12.	Zn	mg/l	APHA23 rd Edition	-
13	Cu	mg/l	APHA23 rd Edition	-

Laboratory Remarks: Above all parameters are within the prescribed Standard Limits

Satvinder Kaur
Satvinder Kaur
 Junior Scientific Officer
 Deputy Technical Cum Quality Manager

2860/1

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

Note: 1 *These parameters are covered under the scope of NABL.

- The results refer only to the tested samples and applicable parameters. Endorsement of Products is neither inferred nor implied.
- Sample will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
- This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Boar.
- The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
- 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.

Environmental Expenditure – RAURI and Kashlog Limestone Mines(Oct 2019 - Mar 2020)

Sr. No.	Environmental Expenditure Area	Capital/Recurring	Amount(Rs)
1	Air pollution control equipments maintenance(Bag Filters etc.), STP maintenance, Analyzers and other monitoring equipments maintenance.	Recurring	67,68,909
2	Monitoring and analysis of environmental parameters, studies, purchase of small new equipments, plantation, fees, salaries & Site cleaning etc.	Recurring	44,98,033
3	Air pollution control equipments running expenses	Recurring	3,15,81,184
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	15,63,972 3,47,636
5	Depreciation on Environmental assets	Capital	4,32,05,354
6	Community development works	Recurring Capital	2,98,99,459 9,13,406

Total Capital Cost: - Rs 4,44,66,396/-

Total Recurring Cost:- Rs 7,43,11,557/-

Total Cost Recurring + Capital Cost :- Rs 11,87,77,953/-

(Rs. Eleven Crore Eighty Seven Lakh Sevnty Seven Thousand Nine Hundred Fifty Three only)

**Compliance of Renewal of Consent conditions imposed by HPSPCB Rauri Plant – 2.6 MTPA
No HPSPCB No. 66 dated 14/02/2019 Valid upto 31/03/2023**

A	Specific Conditions:-	
1.	This 'Renewal of Consent to Operate' is only for the purpose and under the provision of Water Act, 1974 and Air Act, 1981 as the case may be, and will not construed as substitute for mandatory clearances required for the project under any other law/regulation/direction/order and the applicant shall obtain any such mandatory clearance before taking any steps to establish industry/ industrial plant, operation or process or any treatment and disposal system or an extension or addition thereto.	Noted.
2.	Nothing in this Consent shall be deemed to neither preclude the institution of any legal action nor relieve the applicant from any responsibilities, liabilities or penalties to which the applicant is or may be subjected to under this or any other Act.	Noted.
3.	The unit shall apply for further renewal/extension in the validity of the Consent, before the expiry of this 'Renewal of Consent to Operate'.	Noted.
4.	<p>(i) The unit shall ensure compliance of Waste Management Rules i.e. Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016/ Plastic Waste Management Rules, 2016/ E-Waste (Management) Rules, 2016/Construction & Demolition Waste Management Rules, 2016 and Manufacture, Storage & Import of Hazardous Chemical Rules, 1989 and provisions made thereunder, as amended from time to time, without any adverse effect on the environment, in any manner (As Applicable).</p> <p>ii) The unit shall made provisions for the compliance Solid Waste Management Rules, 2016 and provisions made thereunder and unit shall also not practice burning activity of solid waste/waste generated from fuel within/outside premises, to avoid public nuisance.</p>	<p>(i) Being complied.</p> <p>(ii) The waste generated from households and other activities is being segregated properly. The decomposable waste is used for making manure and the solid waste is burnt in Kiln.</p>
5.	<p>This 'Renewal of Consent to Operate' is for:-</p> <p>i) The emissions from all sources conforming to the norms as prescribed in Schedule-I of Environment (Protection) Rules, 1986 as amended from time to time.</p> <p>ii) Noise and Ambient Air Quality shall be maintained within Ambient Air Quality Standards for noise as specified in Schedule-III of Environment (Protection) Rules, 1986 and Noise Pollution (Regulation and Control) Rules, 2000, as amended from time to time.</p>	<p>(i) Being Complied</p> <p>(ii) Being complied.</p>

Compliance of Renewal of Consent conditions imposed by HPSPCB Rauri Plant – 2.6 MTPA
No HPSPCB No. 66 dated 14/02/2019 Valid upto 31/03/2023

	<p>iii) The effluent (Domestic/Industrial) shall conform to the limits as prescribed in Schedule-I or Schedule-VI or Industry specific standards of Environment (Protection) Rules, 1986 as amended from time to time.</p> <p>iv) Sewage and sludge generated from the unit to be disposed-off in a properly designed septic tank system/Sewage Treatment Plant/ Public Sewer System (as applicable).</p>	<p>(iii) Due to dry process not Industrial effluent is being generated. The domestic waste water generated is recycled in STP and reused in plant for cooling make up and horticulture use.</p> <p>(iv) Sewage generated is being treated in STP and the sludge generated is used as manure in horticulture activities.</p>
6.	The unit shall ensure regular operation and maintenance of Pollution Control Devices to achieve the norms as prescribed in Environment (Protection) Act, 1986 and the achievement of the adequacy and efficiency of the effluent treatment plant/pollution control devices/re- circulation system installed shall be the entire responsibility of the unit.	The maintenance of APCDs is carried out on regular basis to keep the emission level well below the prescribed limits. Adequacy and efficiency of STP is also conducted by third party NABL accredited lab.
7.	The unit shall ensure regular operation and maintenance of separate energy meter/flow meter for running pollution control devices and shall also maintain record with respect to operation of air pollution control device/effluent treatment plant, so as to satisfy the Board regarding the regular operation of air pollution control device/effluent treatment plant and shall maintain log book for the monthly reading / record.	Being complied.
8.	CONDITIONS UNDER WATER (PREVENTION & CONTROL OF POLLUTION) ACT,1974.	
a	The unit shall maintain the record regarding the daily water consumption as per flow meter installed.	Records are maintained.
b	The unit shall ensure that terminal manhole(s) at the end of each collection system and a manhole upstream of final outlet (s) out of the premises of the industry for measurement of flow and for taking samples.	
c	The pollution control devices shall be interlocked with the manufacturing process of the industry (if applicable) and the authorized outlet and mode of disposal shall not be changed without the prior written permission of the Board. Unit shall not use any unauthorized outlet(s) for discharging effluents from its premises.	Noted.
d	Solids, sludge, filter backwash or other pollutant removed from or resulting from treatment or control of waste waters shall be disposed-off in scientific manner.	We are maintaining zero discharge. Sludge generated is used as manure in horticulture activities.

**Compliance of Renewal of Consent conditions imposed by HPSPCB Rauri Plant – 2.6 MTPA
No HPSPCB No. 66 dated 14/02/2019 Valid upto 31/03/2023**

9	CONDITIONS UNDER AIR (PREVENTION & CONTROL OF POLLUTION) ACT 1981.	
a	a) The unit shall ensure port-holes, platforms and/or other necessary facilities as may be required for collecting samples of emissions from any chimney, flue or duct or any other outlets as per the specifications.	All necessary facilities have been provided for collecting samples.
b	b) The unit shall discharge air emissions through a stack of minimum height as specified in 'Consent to Establish' and shall follow standards laid down from time to time. For industrial furnaces and kilns, the criteria for selection of stack height would be based on fuel used for the corresponding steam generation & as per specification.	Being complied.
d	Unit shall ensure Stack height for diesel generating sets as per specification.	Being complied.
E	The unit shall ensure regular operation and maintenance of installed canopy and stack of the D.G sets so as to control the noise & air pollution in order to comply with the provision of notification No GSR-371 E dated 17-5-2002 or direction as issued by MOEF from time to time, under Environment (Protection) Act, 1986.	Complied.
f	The unit shall ensure disposal of boiler ash/fuel ash through authorized person or within premises in a scientific manner (as the case may be) and shall maintain proper record for the same, if applicable.	NA
g	The unit shall ensure regular operation and maintenance of air pollution control arrangements for control emission from its coal/fuel handling area and from handling, transportation and processing of raw material & product of the industry.	All the raw materials including fuel are being stored in closed sheds and also transported in trucks covered with tarpaulin.
10	The unit shall ensure valid and approved on-site and off-site emergency plan, approved by the Chief Inspector of Factories, Himachal Pradesh (If applicable).	Complied.
11	The unit shall ensure regular operation and maintenance of real time online monitoring equipment's and provisions for the un-interrupted transfer of data as per guidelines of CPCB (if applicable).	AMC has been given to the suppliers of real time online monitoring equipments and the data is being submitted to CPCB without interruption.
12	The unit shall provide adequate arrangements for fighting the accidental leakages/ discharge of any air pollutant/gas/liquids from the vessels, mechanical equipment's etc. which are likely to cause environmental pollution.	As per emergency preparedness plan we have provided adequate arrangements.

Compliance of Renewal of Consent conditions imposed by HPSPCB Rauri Plant – 2.6 MTPA
No HPSPCB No. 66 dated 14/02/2019 Valid upto 31/03/2023

13	The unit shall plant & maintain minimum three layer of trees so far possible as per plantation guide (may be download from the website http://hppcb.nic.in/plantationguide.pdf) all along the boundary of the industrial premises and check air/water/noise pollution at source.	Plantation is being raised in consultation with HFRI Shimla
14	Any guidelines issued by the Central Government/State Government/MoEF/CPCB/SPCB/any other authority concerned, shall be binding.	Noted.
15	This 'Renewal of Consent to Operate' is subject to orders on any litigation pending in any Court of Law. Any direction/order issued by any court shall be binding (if any).	Noted.
16	The Board reserves the right to revoke the 'Renewal of Consent to Operate' granted to the industry at any time, in case the industry is found violating the provisions of Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981 as amended from time to time.	Noted.
17	The unit shall comply with any other conditions laid down or directions issued in due course by the Board under the provisions of the Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981.	Noted.
B	Other conditions	
1	The unit shall comply with the conditions imposed by the MoEF/State Level Environment Impact Assessment Authority/ District Level Environment Impact Assessment Authority in the environmental clearance granted to it as required under EIA notification dated 14-9-06, if applicable.	EC conditions are being complied and reports are submitted to MoEF & CC with a copy marked to HPSPCB on half yearly basis.
2	The issuance of this consent does not convey any property right in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Central, State or Local Laws or Regulations.	Noted.
3	Stone Crusher units shall comply with the provisions of guidelines notified by the State Government vide Notification No. STE-E(3)-11/2012, dated 29-05-2014 (If Applicable).	Noted.
4	Brick Kiln units shall comply with the provisions of guidelines notified by the MoEF vide Notification No. G.S.R.233.(E), dated-15-03-2018 and by the State Government vide Notification No. STE-E(5)-6/2013, dated-07-03-2014 (If Applicable).	NA
5	Hydroelectric Projects shall install Online Real Time Monitoring System for the measurement of 15% of minimum discharge in lean season as per orders of Court/Government. The unit shall also ensure provisions	NA

Compliance of Renewal of Consent conditions imposed by HPSPCB Rauri Plant – 2.6 MTPA
No HPSPCB No. 66 dated 14/02/2019 Valid upto 31/03/2023

	for the regular and uninterrupted transfer of data from the real time online monitoring system for 15% of minimum discharge of flow to SPCB, failing which unit shall be liable for action on account of violation of the directions issued by Court/Government/SPCB in this regard (If Applicable).	
6	Unit shall strictly adhere to the capacity approved by the Industries Department/ Department of Tourism & Civil Aviation/any other concerned Authority (As Applicable).	Noted.
7	The unit shall not cause any nuisance/traffic hazard in vicinity of the area.	Noted.
8	The unit shall ensure that there will not be significant visible dust emissions beyond the property line.	There is not visible dust emission. The emission is well within the prescribed standards.
9	The unit shall obtain and submit Insurance cover as required under the Public Liability Insurance Act, 1991.	Complied.
10	Unit shall submit all the annual/quarterly returns, as per timeline.	Being Complied.
11	The industry shall submit a yearly certificate to the effect that no addition/up-gradation/ modification/ modernization has been carried out during the previous year otherwise the industry shall apply for the varied consent.	Noted.
12	The unit shall maintain record regarding the operation of effluent treatment plant i.e. record of quantity of chemicals and energy utilized for treatment and sludge generated from treatment so as to satisfy the Board regarding regular and proper operation of pollution control equipment.	Noted.
13	Any amendments/revisions made by the Board/CPCB/MOEF in the emission/stack height standards shall be applicable to the industry from the date of such amendments/revisions.	Noted.
C	Special Conditions	
1	This consent is subject to condition that the unit is allowed to use imported pet coke as feed stock in the manufacturing process for clinker production as below: Pet coke quantity: 260000 tons per annum Pet coke quantity: 21667 tons per month Source of pet coke: Imported, purchase from refinery in India (domestic), Authorized dealers in India and or combination.	Noted.
2	Unit shall comply all the provision of the Guidelines for the regulation and monitoring of imported pet coke issued by the MoEF & CC, Government of India vide letter dated 10-09-2018.	Being complied.
3	Unit shall comply the orders of Government of Himachal Pradesh issued vide letter dated 23-08- 2018 regarding substitution of 0.1 % of the conventional fuel	Complied.

**Compliance of Renewal of Consent conditions imposed by HPSPCB Rauri Plant – 2.6 MTPA
No HPSPCB No. 66 dated 14/02/2019 Valid upto 31/03/2023**

	by biomass and Combustible Solid waste.	
4	Import of pet coke is allowed to be use as feed stock only i.e. captive purpose only and no trading shall be done.	Noted.
5	Industry shall furnish opening and closing stock of imported pet coke along with quantity during the month along with its consumption to the Head office, so that the same can be sent to CPCB, Delhi.	Noted.
6	The unit shall comply with the emission standards prescribed for the co-processing of Hazardous and other waste authorization notified by MoEF & CC adted 10-05-2016.	Being complied.
7	The OCEMS installed by the unit be maintained properly as per CPCB direction and data be uninterruptedly be sent to the website of SPSB/CPCB.	AMC has been given to supplies and maintained properly. Data of the same is sent on CPCB and HPSPCB uninterruptedly.
8	This consent is subject to the condition that all the PCDs provided by the unit shall comply to the norms as prescribed under Schedule-I of Environment Protection (rules) 1986, if at any time unit failed to comply the norms action shall be taken as per law.	Noted.
9	This consent is subject to the ratification of the State Board or subject to any litigation pending at any Court of Law.	Noted.
10	This consent is subject to any other direction issued by MoEF & CC, Government of India, CPCB and HPSPCB or any other direction of any Apex Court.	Noted.