

Registered Post

Ref. ACH/EMD/F-20/05(01)/2017

30 May, 2017

Dr.S.C. Katiyar,
Regional Office MoEF,
Pearson Road, FRI Campus,
New Forest Dehradun – 248006.

Sub: Compliance Status for the period from Oct, 2016 to Mar, 2017 for:-

A. Rauri Plant:-

- (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)

B. Kashlog Limestone Mines:-

- (i) Expansion of Kashlog Limestone Mining Project of M/s Gujarat Ambuja Cement Ltd. Located in parts of Village(s) Kashlog, Mangu, Pati, Chola, Gyana, Rauri and Sangoi, Tehsil Arki, District Solan, Himachal Pradesh- environmental clearance reg. – J-11015 /200/2005-IA.II (M)

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. Gyana Khad water analysis report is enclosed as table – 5.

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)

6. Results of Ambient Air Quality monitored at 4 locations in mines area are given in table- 6.

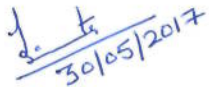
List of annexure attached are as below:

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 Rauri Plant annexure 3.
4. Digital processing report of lease area as annexure4.

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)**


30/05/2017

(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 in CD.

**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 50mg/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.</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


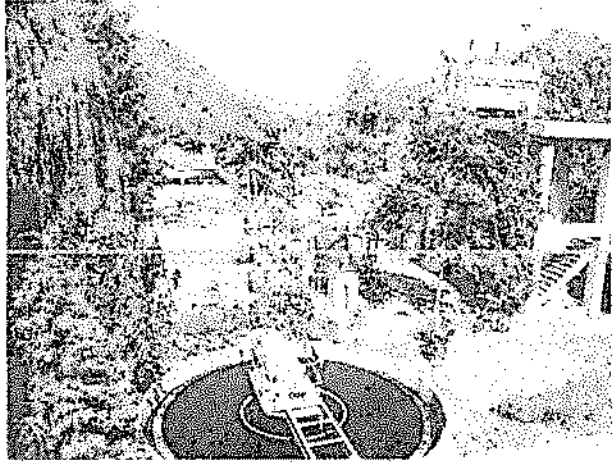
**COMPLIANCE OF SPECIFIC & GENERAL CONDITIONS IMPOSED BY THE MoEF FOR PROPOSED
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	<p>to control air emissions. Bag house in raw mill and kiln, bag filters in cement mill and all the transfer points shall be provided. The dust collected from the pollution 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). Being a dry process no effluent is generated from the process. (b). However the domestic waste water generated from residential facilities as</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.	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. (c) Treated water analysis report is enclosed as table 2. (d) 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. The total Rain water recharged during the year 2016 is 11460 m3.
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.	a) A report on green belt has been submitted vide letter ACL/EMD/F-13/03(6)/2016. (b). We have already initiated the plantation works along NH- 205 for the widened sites in collaboration with SFD.

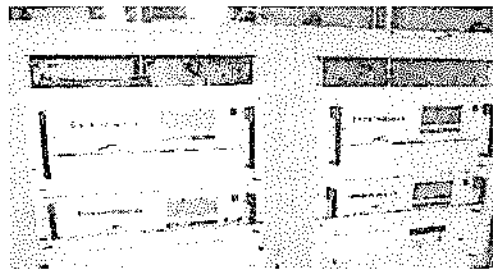
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		Eco- Green Park along NH - 205 Kararaghat
ix.	Solid waste generated shall be 100 % recycled and reutilized in the process itself. Treated STP sludge shall be used for green belt development.	<p>(a). Solid waste generated is being recycled and reutilized in the process by 100 %.</p> <p>(b). Treated Biological Sludge generated from STP is being used for green belt development.</p> 
		Sewage Water Reclamation Plant
x.	The company shall undertake eco-development measures including community welfare measures in the project area.	<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. An amount of Rs 2,67,56,816 has been used for community welfare activities from Oct, 2016 to Mar, 2017. Ambuja Cement Foundation has been awarded in various disciplines as below –</p> <p>a) 1 st Prize in 3rd CII conference on Corporate Social Responsibility "Ensuring Equity between Business and Society – May 17, 2013.</p> <p>b) 1st Prize "Corporate Meet and CSR Awards - We Care" organized by Amity Global Global Business School in CII</p>

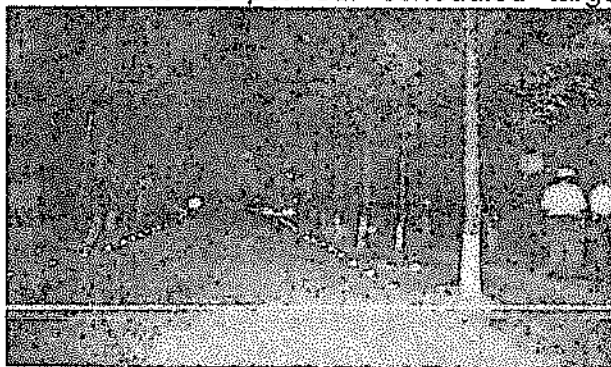
COMPLIANCE OF SPECIFIC & GENERAL CONDITIONS IMPOSED BY THE MoEF FOR PROPOSED CEMENT PLANT AT VILLAGE RAURI - 1.8 MTPA- J-11011/203/2005 IA-II(I).

		Chandigarh-Nov 22, 2013 c) 1 st Prize by NABARD for Best Partnership in Watershed Projects on excellent performance in implementation of Watershed Development Projects in Himachal Pradesh. –January 20, 2015
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.	According to Rehabilitation and resettlement plan as per state policy seven families rehabilitated.
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	We are already monitoring the ambient air quality at three locations and regularly submitting the reports to SPCB and to MoEF. We have also installed the Continuous

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	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.	<p>Ambient Air Quality monitoring station. Ambient Air Quality Monitoring report is enclosed as table 3.</p>  <p align="center">Continuous Ambient Air Quality Monitoring Station</p>
iv.	Industrial wastewater should be properly collected, treated so as 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.	Being a dry process, no industrial waste water is being generated from the process. 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)	<p>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 –</p> <ul style="list-style-type: none"> 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 also been taken up for reducing 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	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

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	and records maintained. The programme must include lung function and sputum analysis tests once in six months.	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 be followed. Darlaghat unit was declared to be cleanest location across Ambuja.
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 set up under the control of Senior Executive.	<p>(a). A separate Environmental Management Division has already been set up to look after environment related activities.</p> <p>(b). Monthly EMS awareness program & other regular eco-green activities are being carried out as per our scheduled targets.</p>  <p align="center">Earth Hour celebration</p>
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.	<p>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.</p> <p>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.</p>
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	Six monthly compliance reports for the conditions stipulated in environmental clearance granted by MoEF are being submitted to The Regional Office.

**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).**

	monitored data along with the statistical interpretation should be submitted to them regularly.	
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 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.	Advertisement has been made in two local news papers and a copy has been submitted to the Regional Office of MoEF, Chandigarh.

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	Being complied.

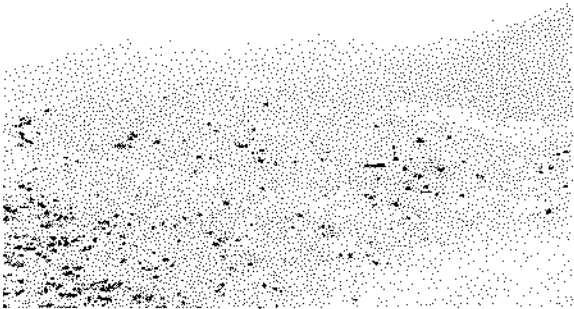
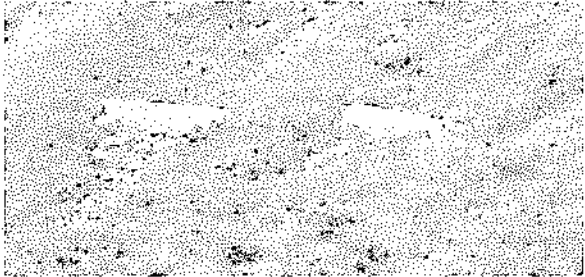
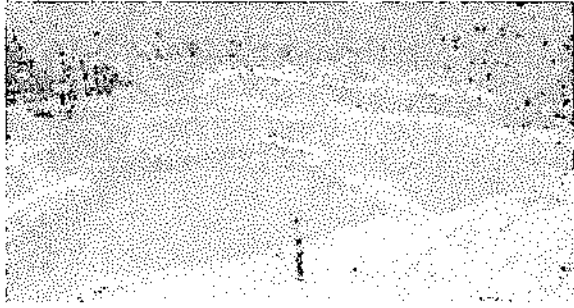
Compliance of conditions imposed by MoEF regarding Amendment in EC for Rauri Plant at Village Rauri, Distt. Solan, Himachal Pradesh [(F.No. J-11011/203/2005-LA II (1))]

	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 bring 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.	Being complied.

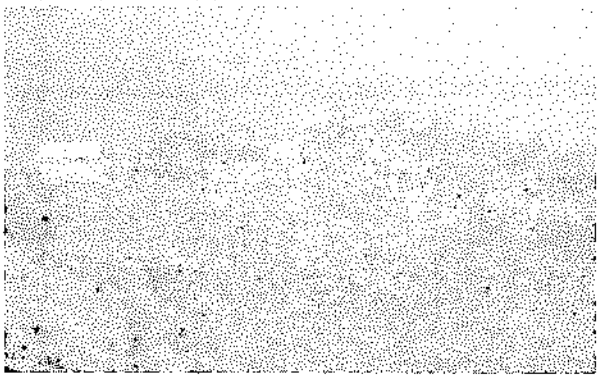
**COMPLIANCE OF CONDITIONS LAID DOWN BY MoEF IN NOC GRANTED FOR THE EXPANSION OF
KASHLOG LIMESTONE MINES OF AMBUJA CEMENTS LIMITED J-11015 /200/2005-IA.II (M)**

Sr. No.	STIPULATION	ACTION
2A. Specific Conditions		
(i)	All the conditions stipulated by the State Pollution Control Board in their Consent should be effectively implemented.	Implemented.
(ii)	The project proponent shall obtain prior approval of the Chief Wildlife Warden before enhancing the production from the mine.	Necessary permission / No Objection Certificate for increase in the rate of limestone extraction from the existing Mining Lease area located in parts of village(s) Kashlog, Mangu, Pati Chola, Gyana, Rauri and Sangoi has been obtained.
(iii)	The project proponent shall obtain requisite forestry clearance for diversion of entire forestland involved in the project from the competent authority prior to start of enhanced production from the mine. No mining work shall be carried out in the forest area for which forestry clearance has not been obtained.	Required Forestry clearance for diversion of forestland has been obtained.
(iv)	The project proponent should prepare a comprehensive plan to combat environmental degradation including landslide keeping in view the location of mine in seismically active zone IV and landslide prone zone. The proponent should identify critically degraded areas in terms of hectares and prepare the area maps along with time bound action plan for their improvement including details of protective structures using perennial soil binding native grass species, shrubs and tree species and earmark separate budgetary provision for this activity. Details in this regard shall be submitted to this Ministry and its Regional Office located at Chandigarh within 3 months.	A comprehensive plan to combat environmental degradation has been made and submitted vide our office letter No. ACH/EMD/F-13/01-70 dated 31 st January 2007.
(v)	The environmental clearance is subject to approval of the State Landuse Department, Government of Himachal Pradesh for diversion of agricultural land for non-agricultural use.	Noted
(vi)	The mining operations shall not intersect groundwater table. Prior approval of the Ministry of Environment & Forests and Central Ground Water Authority shall be obtained for mining below water table.	Mining does not intersect ground water.


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(vii)	<p>Topsoil should be stacked separately at earmarked sites and should not be kept active for long period. It should be used for reclamation and rehabilitation of the mined out areas.</p>	<p>Availability of Topsoil is very less in quantity. However, this quantity of Top soil is being used for plantation.</p>  <p align="center">Top soil stacked separately for reclamation and rehabilitation</p>
(viii)	<p>Catch drains and siltation ponds of appropriate size should be constructed for the working pit, and soil dump to arrest flow of silt and sediment. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly desilted particularly after monsoon and maintained properly.</p> <p>Garland drain (size, gradient and length) shall be constructed for mine pit and soil dumps and sump capacity should be designed keeping 50 % safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits should be constructed at the corners of the garland drains and desilted at regular intervals.</p>	<p>Check dams & check filters have already been provided surrounding to mines area for water quality management. Except these retaining walls and Surface drains etc. are also constructed.</p>  <p align="center">Check Dam/Check Walls</p> <p>To harvest rainwater for ground water recharging three rainwater harvesting reservoirs of capacity 73457m³ have been provided in Mines.</p>  <p align="center">A Rainwater harvesting pond at mines.</p>
(ix)	<p>Dimension of the retaining wall at the OB benches within the mine to check run-off and siltation should be based on the rainfall data.</p>	<p>No Over Burden shall be generated.</p>

COMPLIANCE OF CONDITIONS LAID DOWN BY MoEF IN NOC GRANTED FOR THE EXPANSION OF KASHLOG LIMESTONE MINES OF AMBUJA CEMENTS LIMITED J-11015 /200/2005-IA,II (M)

(x)	<p>Plantation shall be raised in an area of 239.06 ha including a green belt around ML area, roads etc. by planting the native species in consultation with the local DFO / Agriculture Department. The density of the trees should be around 2000 plants per ha.</p>	<p>As per the EMP, 239.06 area shall come under plantation once the mining activities area completed in the ML area. This comprises 196 ha of mined and reclaimed area and 43.06 ha of virgin non mineralised area. Out of total ML area of 469.00 ha, post mining, a total of 225 ha area would be available for reclamation and rehabilitation. It has been envisaged to convert 29 ha reclaimed area to water bodies. Rest of the reclaimed areas i.e., 196 ha would be rehabilitated in the form of afforestation and orchards. At the end of mine life, out of the balance 244 ha area which is not amenable for excavation for mineral raising, plantation would be carried out in phases over 43.06 ha of this area while remaining area would remain undisturbed and shall form a part of safety zone and other statutory barriers. As on date, 1 ha out of 196 ha area has been reclaimed and plantation has been done on 7.48 ha out of 43.06 ha. area in consultation with local DFO.</p>  <p align="center">Plantation in Mines</p>
(xi)	<p>Regular monitoring of the flow rate of the springs and perennial nallah will be carried out and records maintained.</p>	<p>Regular monitoring is being carried out and records are maintained. Water quality monitoring reports are enclosed as Table 6.</p>
(xii)	<p>Regular monitoring of ground water level and quality should 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, CGWB. The frequency of monitoring should be four times a year, pre-monsoon (April / May), monsoon (August), post-monsoon (November), and winter (January). Data thus collected should be sent at regular</p>	<p>Due to open cast mining, we are not using the ground water, so there is no requirement for this monitoring in our case. Further ground water quality monitoring is being carried out by third party (NABL accredited lab). A letter in regard to installation of piezometers & ground water augmentation has already been written to Regional Director, CGWB seeking their advice on the issues vide letter no. ACL:MR:HP:CGWA:2015:1 dated 30-06-2015. A letter from CGWB North has been</p>

COMPLIANCE OF CONDITIONS LAID DOWN BY MoEF IN NOC GRANTED FOR THE EXPANSION OF KASHLOG LIMESTONE MINES OF AMBUJA CEMENTS LIMITED J-11015 /200/2005-IA.II (M)

	intervals to MoEF, CGWA and Regional Director, CGWB.	received vide TC-04/NHR/STI/State/10-643 dated 2/12/2015. Suggested measures shall be implemented accordingly.
(xiii)	Suitable conservation measures to augment groundwater resources in the area shall be planned and implemented in consultation with Regional Director, CGWB	Regional Director, CGWB is being approached to suggest conservation measures vide letter no. ACL:MR:HP:CGWA:2015:1 dated 30-06-2015. A letter from CGWB North has been received vide TC-04/NHR/STI/State/10-643 dated 2/12/2015. Suggested measures shall be implemented accordingly.
(xiv)	Only wet drilling shall be adopted. Drills should either be operated with dust extractors or equipped with water injection system.	Being complied.
(xv)	Blasting operation should be carried out only during the daytime. Controlled blasting should be practiced. The mitigative measures for control of ground vibration and to arrest fly rocks and boulders should be implemented.	<p>(a). Blasting operation is being carried out in daytime only.</p> <p>(b). We use IKON digital energy control system to blast in critical areas. This is system is more precise and accurate and generates less ground vibrations, fly rock and give better fragmentation.</p> <p>Advanced controlled blasting technique is practiced such as use of NTD, Excel, muffled blasting, optimum quantity of blasting material are practiced to avoid dust generation, fly rock, noise level and ground vibration because of the activity.</p> <p>Secondary blasting is avoided by use of hydraulic breaker.</p>  <p align="center">Hydraulic Breaker</p>
(xvi)	Minerals handling plant should be provided with adequate number of high efficiency dust extraction system. Loading and unloading areas including all transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.	Minerals handling plant are being provided with bag filters. Bag filters are attached at all the transfer points to arrest the dust. The dust so collected is automatically recycled in the process
(xvii)	Vehicular emissions should be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles	Regular maintenance of vehicles is carried out to keep vehicular emission under control. PUC monitoring of the vehicles is

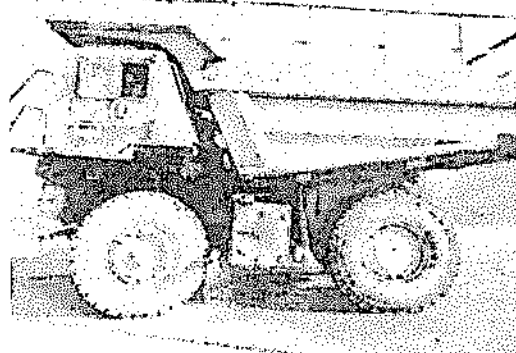
COMPLIANCE OF CONDITIONS LAID DOWN BY MoEF IN NOC GRANTED FOR THE EXPANSION OF KASHLOG LIMESTONE MINES OF AMBUJA CEMENTS LIMITED J-11015 /200/2005-IA.II (M)

	used in mining operations and in transportation of mineral. The vehicles should be covered with a tarpaulin and shall not be overloaded.	done regularly. Raw material is fed to the crusher located within the mine from which it is sent to plant through fully covered Overland Belt Conveyor. So, vehicles are not required to be covered.
(xviii)	The project proponent should take all precautionary measures during mining operation for conservation and protection of endangered fauna such as leopard, wild dog etc. reported in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in conservation with the State Forest and Wildlife Department. Necessary allocation of funds for implementation of the conservation plan shall be made and the funds so allocated shall be included in the project cost. Copy of action plan may be submitted to the Ministry and its Regional Office within 3 months.	Wildlife Conservation Plans have been prepared in consultation with State Forest & Wildlife Department and the same are authenticated by PCCF (Wildlife) vide letters dated WL(Misc)-73/Mining/VI/8295 dated 14/1/2014 and WL(Misc)-73/Mining/VI/7473 dated 24-12-2013. The allocated necessary funds for the purpose have already earmarked in the Conservation plan and Rs. 97,10,000/- (Rupees ninety seven lakh ten thousand only) have already been submitted for the wildlife conservation activities vide letter no. ACL/CORP. AFFAIRS/WL CESS/2015 Dated 17-01-2015. Rs 47.90 lacs has been submitted as part of commitment in WLCP to State Wildlife Forest Deptt. through CAMPA Account (RTGS) on 18/03/2016 for year 2016. Recently we have submitted Rs 10 lacs to State State Wildlife Forest Deptt. through CAMPA Account. Total amount submitted Rs. 1.55 crores for WLCPs.
(xix)	Digital processing of the entire lease area using remote sensing technique should be done regularly once in three years for monitoring land and pattern and report submitted to MoEF and its regional office.	Digital processing of the lease area has been carried out and report is attached as Annexure 4.
(xx)	Land oustees should be rehabilitated as per the Resettlement and Rehabilitation plan approved by the Government of Himachal Pradesh.	Land oustees are being rehabilitated as per the Resettlement and Rehabilitation plan approved by the Government of Himachal Pradesh.
(xxi)	Consent to operate should be obtained from SPCB before starting enhanced production from the mine.	Consent to operate has been granted by HPSPCB.
(xxii)	Sewage treatment plant should be installed for the colony. ETP should also be provided for workshop and mineral separation plant wastewater.	Sewage treatment plant has been provided for colony. Settling tank and Oil & Grease Trap has been provided for workshop.
(xxiii)	A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forest 5 Years in advance of final mine	The point has been noted and shall be taken care well within time.

Environment protection measures & technology

AMBUJA CEMENTS LIMITED (UNIT-RAURI)

**COMPLIANCE OF CONDITIONS LAID DOWN BY MoEF IN NOC GRANTED FOR THE EXPANSION OF
KASHLOG LIMESTONE MINES OF AMBUJA CEMENTS LIMITED J-11015 /200/2005-IA.II (M)**

	closure for approval.	
B. General conditions		
(i)	No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.	If there is any change in mining technology and scope of working, prior approval shall be taken from Ministry of Environment and Forests.
(ii)	No change in the calendar plan including excavation, quantum of mineral limestone and waste if any should be made.	There is no change. If any, prior approval shall be taken from MoEF.
(iii)	Four ambient air quality - monitoring stations should be established in the core zone as well as in the buffer zone for RPM, SPM, SO ₂ , NO _x monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be under taken in consultation with the State Pollution Control Board.	Ambient air quality is being carried out at four locations & reports of the same are being submitted to HPSPCB. Same are enclosed as <i>table 6</i> .
(iv)	Data on ambient air quality (RPM, SPM, SO ₂ , NO _x) should be regularly submitted to the Ministry including its Regional office located at Chandigarh and the State Pollution Control Board / Central Pollution Control Board.	Data is regularly being submitted to HPSPCB, CPCB and MoEF Chandigarh on regular basis.
(v)	Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.	<p>To control the fugitive dust emission from various sources we have installed the bag filters. Restricted speed limits for the vehicles inside plant & mines also help to reduce the fugitive dust emission. Water spraying arrangement on haul roads, loading and unloading and at transfer points have been provided and properly maintained.</p> 

COMPLIANCE OF CONDITIONS LAID DOWN BY MoEF IN NOC GRANTED FOR THE EXPANSION OF KASHLOG LIMESTONE MINES OF AMBUJA CEMENTS LIMITED J-11015 /200/2005-IA.II (M)

		Water Sprinkling on Haul Roads
(vi)	Measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc should be provided with ear plugs / muffs.	All the precautionary measures have been taken to keep the noise levels within limits. The noise level inside the cabin of HEMM is very low however the workers engaged in operations of HEMM are provided with ear plugs/ muffs.
(vii)	Industrial waste water (workshop and waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 th May, 1993 and 31 st December, 1993 or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluents.	Settling tank and Oil & Grease Trap has been provided.
(viii)	Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects Occupational health surveillance programme of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	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 be followed.
(ix)	A separate environment management cell with suitable qualified personnel should be set up under the control of a senior executive, who will directly report to the Head of the Organisation.	(a) A separate Environmental Management Division has already been set up to look after environment related activities. (b). Monthly EMS awareness program & other regular eco-green activities are being carried out as per our scheduled targets.
(x)	The project authorities should inform to the Regional Office located at Chandigarh regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	The production was started from 27 th March 2010.
(xi)	The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry and its Regional Office located at Chandigarh.	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.
(xii)	The Regional Office located at Chandigarh shall monitor compliance of stipulated	Officer(s) of Regional Office is/ are always fully co-operated.

**COMPLIANCE OF CONDITIONS LAID DOWN BY MoEF IN NOC GRANTED FOR THE EXPANSION OF
KASHLOG LIMESTONE MINES OF AMBUJA CEMENTS LIMITED J-11015 /200/2005-IA.II (M)**

	conditions. The project authorities should extend full co-operation to the officer (s) of Regional Office by furnishing the requisite data / information / monitoring reports.	
(xiii)	A Copy of clearance letter will be marked to concerned panchayat / local NGO, if any, from whom suggestion / representation has been received while processing the proposal.	A Copy of clearance letter has been marked to concerned authorities.
(xiv)	State Pollution Control Board should display a copy of clearance letter at the Regional Office, District Industry Centre and Collector's Office / Tehsildar's office for 30 days.	-
(xv)	The project authorities should advertise at least in two local newspapers widely circulated, one of which should be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at website of the Ministry of Environment and Forests at http://envfor.nic.in and a copy of the same should be forwarded to the Regional Office of this ministry located at Chandigarh.	Advertisement has been made in two local local news papers, a copy of which has already been submitted to MoEF, Chandigarh.



Save Environment, Save Earth
EMD- Team, ACL Darlaghat

AMBUJA CEMENTS LIMITED (UNIT-RAURI)

Table - 1

Monthly Average of Stack Monitoring Results
(Average Value)
(From Oct 2016 to March 2017)

MONTHS	Monthly PM Value in mg/Nm ³			
	Glass Bag House	Cooler ESP	Coal Mill B/F	Limestone Crusher B/F
Oct-16	*	*	*	*
Nov-16	9.54	14.39	10.46	14.95
Dec-16	17.21	17.10	19.04	13.89
Jan-17	12.30	18.31	15.37	17.76
Feb-17	16.45	19.68	18.39	16.16
Mar-17	6.37	18.05	14.92	15.65

* Plant under maintenance

Table - 2

Inlet and Outlet Sewage Water Characteristics (Monthly Average)
(From Oct 2016 to April 2017)

MONTHS	INLET			OUTLET		
	pH	BOD	TSS	pH	BOD	TSS
Oct-16	8.10	239.00	356.00	7.50	12.70	11.70
Nov-16	8.10	266.00	362.00	7.40	12.40	12.80
Dec-16	8.10	266.00	380.00	7.50	13.00	13.00
Jan-17	8.10	257.00	357.60	7.50	11.00	12.40
Feb-17	8.10	252.00	361.40	7.50	12.50	11.70
Mar-17	8.08	257.00	362.60	7.47	12.50	12.43

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 October, 2016 to March, 2017)

MONTH	Rauri - 1				Rauri - 2				Rauri - 3			
	PM 2.5 ($\mu\text{g}/\text{m}^3$)	PM 10($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO ₂ ($\mu\text{g}/\text{m}^3$)	PM 2.5 ($\mu\text{g}/\text{m}^3$)	PM 10($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO ₂ ($\mu\text{g}/\text{m}^3$)	PM 2.5 ($\mu\text{g}/\text{m}^3$)	PM 10($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO ₂ ($\mu\text{g}/\text{m}^3$)
Oct-16	21.77	66.51	4.00	11.88	29.06	70.28	4.63	13.38	27.14	64.16	4.50	11.63
Nov-16	19.35	69.66	4.38	12.63	23.07	69.66	5.00	12.88	17.50	67.71	5.25	13.25
Dec-16	29.17	74.15	4.38	11.13	25.54	71.29	5.00	12.50	23.44	69.50	5.75	12.00
Jan-17	18.70	44.00	4.17	8.67	16.15	55.58	4.83	9.17	19.69	59.25	3.83	9.33
Feb-17	14.01	65.67	3.75	11.25	20.36	68.13	4.00	10.00	18.28	62.40	4.00	12.50
Mar-17	13.33	66.95	4.50	11.00	17.08	59.54	4.63	11.50	15.31	68.42	4.50	12.38

Monthly Average of Ambient Air Quality Monitoring Results Rauri Plant
(Lead, Nickel, Arsenic & CO)
(From October, 2016 to March, 2017)

MONTH	Rauri - 1				Rauri - 2				Rauri - 3			
	Lead ($\mu\text{g}/\text{m}^3$)	Nickel (ng/m^3)	Arsenic (ng/m^3)	CO (mg/m^3)	Lead ($\mu\text{g}/\text{m}^3$)	Nickel (ng/m^3)	Arsenic (ng/m^3)	CO (mg/m^3)	Lead ($\mu\text{g}/\text{m}^3$)	Nickel (ng/m^3)	Arsenic (ng/m^3)	CO (mg/m^3)
Oct-16	ND	ND	ND	0.660	ND	ND	ND	0.620	ND	ND	ND	0.580
Nov-16	ND	ND	ND	0.610	ND	ND	ND	0.460	ND	ND	ND	0.540
Dec-16	ND	ND	ND	0.420	ND	ND	ND	0.480	ND	ND	ND	0.520
Jan-17	ND	ND	ND	0.480	ND	ND	ND	0.570	ND	ND	ND	0.550
Feb-17	ND	ND	ND	0.520	ND	ND	ND	0.680	ND	ND	ND	0.560
Mar-17	ND	ND	ND	0.420	ND	ND	ND	0.610	ND	ND	ND	0.540

Table-4

**MONTHLY NOISE MONITORING RESULTS (INSIDE PLANT)
AT AMBUJA CEMENTS LTD. (JUNIT - RAURI)
(From October 2016 TO March 2017)**

MONITORING LOCATION	Oct-16		Nov-16		Dec-16		Jan-17		Feb-17		Mar-17	
	DAY	NIGHT	DAY	NIGHT	DAY	NIGHT	DAY	NIGHT	DAY	NIGHT	DAY	NIGHT
TIME OFFICE RAURI												
(i) With Vehicular Movement	67.1	65.4	67.4	65.9	69.6	65.2	70.8	68.6	79.5	77.8	67.5	64.9
(ii) Without Vehicular Movement	59.5	58.3	59.7	58.1	64.9	63.1	59.6	56.5	65.1	63.1	61.2	58.3
Coal Dump Hopper	69.3	65.1	63.5	59.7	64.3	60.5	65.6	65.2	64.1	62.4	59.7	56.1
Near Raw Maerial Hopper	70.6	69.4	76.1	75.9	82.1	83.2	73.8	72.6	84.3	82.5	74.8	69.5
GBH (Bear YSS 15)	71.2	69.8	84.6	82.1	71.5	70.4	84.3	81.9	72.5	71.8	75.6	72.9
Raw Mill	85.4	84.9	85.2	84.9	85.2	84.9	88.4	86.2	86.7	86.1	86.8	84.6
Infront of CCR	82.3	80.6	86.7	85.5	72.6	71.7	73.2	71.8	82.3	81.6	80.3	78.7
Compressor House - 1												
Inside	82.5	81.9	83.5	82.4	84.1	82.9	85.1	84.6	83.7	81.9	86.2	83.9
Compressor House - 1												
Outside	78.6	77.8	86.1	85.7	86.3	85.7	88.6	87.2	78.2	77.5	85.4	83.7
Compressor House - 2												
Inside	86.9	85.2	85.9	84.9	85.9	84.2	86.9	85.7	86.1	85.2	88.7	86.4
Compressor House - 2												
Outside	82.1	81.7	85.1	84.6	84.3	83.5	83.4	82.5	82.5	81.7	83.6	82.2
Compressor House - 3												
Inside	86.3	85.4	87.3	86.2	87.5	86.1	87.1	85.2	85.4	84.3	86.1	84.5
Compressor House - 3												
Outside	87.1	86.9	86.5	85.8	86.1	85.3	87.5	87.9	86.2	85.1	84.9	83.1
Near Coal Mill	86.7	85.3	87.2	86.5	87.6	85.5	86.8	85.6	84.9	83.6	82.7	81.3
Factory Gate Rauri												
(i) With Vehicular Movement	80.3	74.6	78.6	75.2	80.3	76.7	80.3	78.9	78.6	75.2	80.5	76.9
(ii) Without Vehicular Movement	64.8	62.1	60.8	58.9	64.1	62.5	67.5	75.2	64.1	63.5	71.3	69.5

Table -5

Monthly Average of Gyana Khad Water Quality Analysis Report
(From Oct 2016 to Mar 2017)

MONTH	SAMPLING POINTS	PARAMETERS			
		pH	TSS	TDS	DO
Oct-16	1	7.4	35.1	314.2	4.20
	2	7.6	49.8	368.0	3.90
	3	7.6	41.4	353.6	4.30
	4	7.5	39.0	346.0	4.60
Nov-16	1	7.4	38.9	314.3	4.20
	2	7.7	56.3	352.2	3.90
	3	7.6	45.4	350.1	4.50
	4	7.5	40.4	341.3	4.74
Dec-16	1	7.3	36.3	302.4	4.70
	2	7.6	46.0	340.0	4.10
	3	7.5	39.9	325.2	4.60
	4	7.4	35.4	320.3	5.20
Jan-17	1	7.3	29.9	298.5	4.70
	2	7.6	51.8	354.4	4.10
	3	7.5	38.1	336.0	4.90
	4	7.4	34.6	325.2	5.10
Feb-17	1	7.4	30.6	404.2	4.50
	2	7.7	54.4	438.5	3.60
	3	7.6	44.5	420.4	4.20
	4	7.5	37.4	415.5	4.60
Mar-17	1	7.4	25.2	309.6	4.30
	2	7.6	41.8	355.3	3.60
	3	7.6	32.3	341.3	4.20
	4	7.4	26.7	338.3	4.30

AVERAGE 7.5 39.6 348.5 4.4

Except pH all the parameters are in mg/lit.

Sampling Points

1. 500mts. Upstream of First Nallah before joining Gyana Khad.
2. 500mts. Upstream of Second Nallah before joining Gyana Khad.
3. V-Notch installed in Gyana Khad. (SE Side of ML Area)
4. 500mts. Downstream from V-Notch of Gyana Khad.

(Table -7)

Monthly Average of Ambient Air Quality Monitoring Results Mining Area

(PM 10, PM 2.5, SO₂ and NO_x CONCENTRATION IN µg/m³)

(From Oct 2016 To Mar 2017)

MONTH	Mines Dormitory				Rathoh				Mangoo				Chandi			
	PM 2.5	PM 10	SO ₂	NO _x	PM 2.5	PM 10	SO ₂	NO _x	PM 2.5	PM 10	SO ₂	NO _x	PM 2.5	PM 10	SO ₂	NO _x
Oct-16	30.71	67.98	5.06	10.10	27.52	63.93	3.63	12.58	17.67	56.45	3.70	9.33	16.60	55.35	3.44	9.51
Nov-16	36.59	66.32	4.94	9.75	27.76	63.93	3.94	10.20	26.21	55.35	3.81	8.93	23.96	44.95	3.81	8.68
Dec-16	28.85	65.42	4.88	7.38	27.89	62.36	3.94	8.51	21.76	56.35	4.13	8.50	22.28	42.23	3.88	6.69
Jan-17	27.38	59.69	5.28	15.31	30.00	57.22	3.63	4.50	28.24	49.82	3.50	9.56	19.86	39.22	3.50	9.56
Feb-17	30.48	40.07	5.38	11.38	28.30	63.93	3.75	9.33	16.51	55.35	4.50	9.94	30.13	36.55	4.19	8.69
Mar-17	27.06	63.94	5.00	11.63	28.30	60.04	4.00	9.13	16.73	55.35	3.75	8.75	13.08	45.51	3.75	7.88

Monthly Average of Ambient Air Quality Monitoring Results Mining Area

(Lead, Nickel, Arsenic and CO)

(From Oct 2016 To Mar 2017)

MONTH	Mines Dormitory				Rathoh				Mangoo				Chandi			
	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	Lead µg/m ³	Nickel ng/m ³	Arsenic ng/m ³	CO mg/m ³
Oct-16	ND	ND	ND	0.65	ND	ND	ND	0.53	ND	ND	ND	0.41	ND	ND	ND	0.55
Nov-16	ND	ND	ND	0.71	ND	ND	ND	0.62	ND	ND	ND	0.40	ND	ND	ND	0.48
Dec-16	ND	ND	ND	0.58	ND	ND	ND	0.71	ND	ND	ND	0.54	ND	ND	ND	0.60
Jan-17	ND	ND	ND	0.67	ND	ND	ND	0.84	ND	ND	ND	0.69	ND	ND	ND	0.73
Feb-17	ND	ND	ND	0.71	ND	ND	ND	0.90	ND	ND	ND	0.73	ND	ND	ND	0.69
Mar-17	ND	ND	ND	0.76	ND	ND	ND	0.82	ND	ND	ND	0.70	ND	ND	ND	0.57

Note: Location/Direction from the Mines

Mines Dormitory	4.0 km E from Plant
Rathoh	0.5 km Near Crusher
Mangoo	3.0 km SE from Mines
Chandi	3.0 km NE from Mines

TOTAL NOS. OF PLANTS PLANTED
(FROM Oct. 2016 TO Mar. 2017)

	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	OCT.-16	NOV.-16	DEC.-16	Jan-17	FEB.17	MARCH	Total
Area of Plantation													
Inside Plant Area	15	6	5	42	35	20	25	15	12	19	17	11	222
Around Plant Area	5	2	4	0	0	10	0	0	0	0	0	0	21
Within Colony Area	18	6	7	11	22	60	15	10	8	11	13	7	188
Inside Mines Area	12	10	215	750	1820	969	12	14	10	23	16	14	3865
Total	50	24	231	803	1877	1059	52	39	30	53	46	32	4296

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



ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Sample ID:45569 - Analysis Completion:04/03/2017

Cement. / LAB Inward : 12548

Himachal State Pollution Control Board, Parwanoo

Sector-4

Parwanoo, Distt. Solan

Parwanoo-173220

Tele:01792-232540

Annexure-1

TEST REPORT

Test Report No. : 12548

Date: 04/03/2017

1. Name of the Customer : Ambuja Cements Limited (Suli Plant) - 10034
2. Address : Cement,Village - Suli, P.O. - Darlaghat, Tehsil - Arki,, District - Solan, Himachal Pradesh
Suli-171102, Taluka : Arki, District : Solan(Parwanoo), GIDC : Not In SIDC
3. Nature of Sample : WAT-Water Act(Legal), (Insp Type : HOR-H.O.Reference)
4. Sample Collected By : Anil Kumar , JEE
5. Quantity of Sample Received :
6. Code No. of the Sample : 45569
7. Date & Time of Collection & Inwarding : 05/02/2017 , (1500 to 1500) & 06/02/2017
8. Date of Start & Completion of Analysis : 06/02/2017 & 04/03/2017
9. Sampling Point : final outlet of STP ~-
10. Flow Details (Remarks) : -
11. Mode of Disposal : -
12. Ultimate Receiving Body : 0
13. Temperature on Collection : - & pH Range on pH Strip :6-8
14. Carboys Nos for : 1 & Color & Appearance :Colorless
15. Water Consumption & W.W.G (KLPD) : Ind :800.000 , Dom :400.000 & Ind :0.000 , Dom :150.000

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Suspended Solids	-	-	-	1.1 mg/l
2	Biochemical Oxygen Demand (BOD)	-	-	-	0.4 mg/l
3	COD	-	-	-	4.0 mg/l
4	Oil and Grease	-	-	-	Nil
5	pH	-	-	-	7.30

Laboratory Remarks : Sample is analysed under the supervision of PRINCIPAL SCIENTIFIC OFFICER and found all parameters are within the prescribed standard Limits- DR.T.B.SINGH PSO Parwanoo. By:94-pcb_94 Dt: 04/03/2017

Sanjeev Sharma,SSO

Field Observation :

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. Samples 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 Board in writing.
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.
7. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents

Environmental Expenditure – SULI(October,2016 – March,2017)

Sr. No.	Environmental Expenditure Area	Capital/Recurring	Amount(Rs)
1	a) Sound Barriers/ Acoustics, road works, plant flooring, shed provision etc. b) Any other important environmental asset/ expenditure	Capital	18,00000
2	Air pollution control equipments maintenance, STP maintenance, Analyzers and other monitoring equipments maintenance.	Recurring	56,59,364.80
3	Monitoring and analysis of environmental parameters, studies, purchase of small new equipments ,plantation, fees, salaries etc.	Recurring	3303668
4	Air pollution control equipments running expenses	Recurring	29317945
5	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	14,47,287.77
6	Depreciation on Environmental assets	Recurring	69,00,317.23
7	Community development works	Recurring	2.67.56.816
	TOTAL		75185398.8

Total Rupees Seven Crore Fifty one Lakh Eighty Five Thousand Three Hundred Ninety Eight only.

**Compliance of Renewal of Consent conditions imposed by HPSPCB Rauri Plant – 2.6 MTPA
No HPSPCB/PCBID-12845/3479-81 dated 19/10/2016**

S.No.		
1.	<p>This Consent /Renewal of Consent is for</p> <p>a) The Compliance to the norms for emission as prescribed in schedule-1 of environment (protection) Rules, 1986 as may be prescribed by the Board.</p> <p>b) Noise and ambient air quality to be maintained within Ambient Air Quality Standards for Noise as specified in schedule III of aforesaid Rules.</p> <p>c) The effluent (domestic / industrial) conforming to the limits as prescribed in Schedule – I or Schedule – VI of Environment Protection Rules 1986 as amended or as may be prescribed by the Board.</p>	Being complied.
2.	Pollution Control Devices provided by the unit shall be operated and maintained to achieve the norms as prescribed in Environment (Protection) Act, 1986 as amended from time to time.	Being complied.
3.	The State Board reserves the right to revoke/review and alter the conditions of consent as the case may be.	Noted.
4.	Unit shall not undertake any expansion activity / or additional product in the existing nit without obtaining consent from State Board.	Noted.
5.	Unit shall not pollute any water sources in the area like drinking, pond or well etc.	No water source is being polluted by the industry. Due dry process no effluent is generated from the industry. Domestic waste water is being treated in STP and recycled water is used for plant cooling make up and horticulture use.
6.	No debris shall be thrown along the roads or water course and the debris shall be either utilized or disposed in designated dumping sites.	Complied.
7.	The project proponent shall be liable to clear any past/current liability on account of difference consent fees f detected at any subsequent stage.	Noted.
8.	The emission / effluent shall be got	Samples are being tested by RO concerned and

**Compliance of Renewal of Consent conditions imposed by HPSPCB Rauri Plant – 2.6 MTPA
No HPSPCB/PCBID-12845/3479-81 dated 19/10/2016**

	sampled and tested by the unit as well as concerned Regional Officer as prescribed and further renewal shall be dependent up on the results of samples so collected and tested.	the result of the same is enclosed as annexure 1
9.	The samples of effluent /emissions shall be collected by the RO concerned and the unit shall also get the self monitoring of effluent / emission done within the month and convey the results to the State Board.	Monthly reports are being submitted to State Board.
10.	This consent is subject to the compliance any order passed by Hon'ble High Court or National Green Tribunal or any other court in litigation pending against the unit. This consent is subject to ratification of the State Board.	Noted.
11.	This consent is subject to conditions imposed in EC letter granted by MoEF & CC, Govt. of India or any other amendment / its renewal & any other mandatory valid permissions required for the operation of the plant viz. mining permission, mining consent and mining deed.	Noted.
12.	The unit shall not manufacture the clinker more than the consented capacity and shall submit certified annual proof thereof.	Noted.
13.	The unit shall comply with revised norms notified vide Notification No. G.S.R. 612(E) dated 25.8.2014 and shall maintain noise level less than or equal to the standards prescribed for residential area in Environment Protection Act,1986 near boundary walls.	Unit is complying with revised norms.
14.	In case of any contempt of court orders or violation of instructions issued by MoEF & CC/CPCB/HPSPCB or other concerned departments, the RCTO shall be deemed as withdrawn.	Noted.